THE ECONOMICS OF INSTALMENT SELLING

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A Study in Consumers' Credit

WITH SPECIAL REFERENCE TO THE AUTOMOBILE

By

EDWIN R. A. SELIGMAN, LL.D.

McVickar Professor of Political Economy
Columbia University

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PREFACE

Some time ago there appeared in a weekly periodical an article which sang a funeral dirge over political economy, and which declared that the bankruptcy of economics was illustrated by the failure of its votaries to attack the subject of instalment selling. It was partly to defend the science against this indictment, and to show its competence to deal with an important practical problem that I was led to undertake this study.

After a year's intensive investigation and reflection, I am convinced that an entirely new chapter is here opening up in both theory and business life. After more than a century devoted to the elaboration of the principles and the technique of banking and commercial credit, designed to fit the industrial revolution, we now stand on the brink of another revolution in economic science and economic life, scarcely inferior to its predecessor. If I have succeeded in laying the foundations for a structure devoted to appraising the real meaning of this revolution, I shall be well content to see the stately edifice of the future built up by more skilful hands.

In working out this study, I owe not a little to the collaboration of friends among my colleagues and students. Much assistance was given by Professor Robert Murray Haig, Mr. Robert A. Love, and Mr. Solomon S. Kuznets. Mr. Love was also in general charge, under my supervision, of the special studies which are printed as appendices in Volume Two. These studies were made under the separate direction of Professor George Filipetti, Professor Archibald H. Stockder, Mr. Ralph W. Roby, and Mr. Kuznets. Considerable help was also

afforded in the appendices by Mr. Arthur F. Burns, Mr. D. M. Halfant, Dr. A. S. Tostlebe, and Miss Blanche Schnitzer. My chief indebtedness, however, is due to Mr. John J. Raskob, vice-president of General Motors Corporation and Mr. C. C. Cooper, President of the General Motors Acceptance Corporation. These gentlemen courteously put at my disposal the complete records of their respective organizations, and were prodigal of that assistance which comes only from ripe experience and masterful leadership. Without their generous help this work could not have been written.

E. R. A. S.

Columbia University, May, 1922

INTRODUCTION

This work is divided for purposes of clarity into two parts. The first traces the subject historically and seeks to present an account of actual methods as well as of the extent which the system of instalment selling has attained. The second part attacks the more difficult topic of attempting to judge its real significance in modern economic life. We accordingly designate the first part as historical and descriptive, and the second as analytical.

The second part is likely to arouse misconception. It seems to be in a large measure abstract and theoretical. There is, indeed, not a little endeavor to apply what may be called purely deductive economic reasoning. But attention must be directed to the fact that in reality it is based largely upon inductive methods. The foundation of the entire study has been supplied by a series of elaborate investigations into the facts, carried on intensively for about a year with the help of a whole corps of workers. The investigations are five in number, termed respectively, the consumers' study, the dealers' study, the repossession study, the depression study, and the merchandise study. They are explained as to scope and content in Chapter V below.

In order, however, to preserve the continuity of the narrative, and not to weigh down the text with a multitude of details, the separate investigations, which considerably exceed in bulk the study proper, have been relegated to a series of appendices; and only the essential results of each investigation have been incorporated in the body of the work. This inevitably gives a some-

what distorted impression as to the character of the study. It may, however, be stated that there is scarcely a single opinion expressed which is not based on an analysis of the pertinent facts. The conclusions, such as they are, should be recognized as drawn primarily from the actual conditions of everyday life.

TABLE OF CONTENTS

BOOK II. THE EFFECTS OF INSTALMENT CREDIT

PART ONE

HISTORICAL AND STATISTICAL

CHAPTER I

WHAT IS INSTALMENT SELLING?

1. Instalment Selling as a Form of Credit

What is commonly known as instalment selling has gone under a great variety of names. It is often called the system or method or plan of "credit merchandising," of "deferred payments," of "time sales," of "instalment buying," of "part payments," of "hire-purchase," of "pay-out-of-income," of "contract selling," of "easy payments," of "credit buying," of "partial payments," of "instalment purchase," or, to use the latest term, the "ten-payment plan."

Some of these terms are obviously incorrect. "Credit merchandising" is so general that it can be applied to any form of selling merchandise on credit. "Deferred payments" says nothing about the manner in which, or conditions under which, payment is deferred. "Time sales" comprise the ordinary selling of merchandise under any method except cash. "Part payment" or "partial payment," while opposed to cash payment, covers a multitude of other plans. "Hire-purchase" is peculiar to England as a result of the kind of contract employed there, but does not sufficiently explain the method. "Easy payment" is obviously too uncertain to be of any use. "Contract selling" does not tell us anything about the contract under which the sale is made. "Credit buying" is too generic. "Pay-out-of-income" represents a desire rather than a fact, for a cash payment may be paid out of the income provided that the income is large enough. The "ten-payment plan" refers to a par-

ticular method in a special line. Of all the names suggested instalment buying or instalment selling, as will appear from the analysis below, seems to be the best.

The system may be defined as a transfer of wealth, the payment for which is deferred in whole or in part to the future and is liquidated piecemeal or in successive fractions, under a plan agreed upon at the time of transfer.

It will be seen that there are four essential elements in this definition. In the first place there is a present transfer of wealth. The wealth may consist of physical, tangible goods, or of money, or of the more incorporeal things known as privileges or rights. In sum, what is transferred or handed over is either commodities or purchasing power which is designed ultimately to secure commodities.

The second point is the absence of any cash payment and the provision that the payment, in whole or part, shall be made in the future. The wealth is handed over now; the payment for the wealth is, in part at least, deferred to the future.

The third characteristic is that the future payment is made not in block or in a lump sum but piecemeal; that is, periodically and in successive fractions or quotas separated from each other by certain intervals agreed upon at the time of sale.

The fourth element consists of a definite agreement providing for the size of the down payment, the number of instalments and the conditions of repurchase or repossession. These will naturally vary in detail from commodity to commodity, and from transaction to transaction in the same commodity.

It is clear that the phenomenon with which we deal is a form of credit. Credit has been variously defined. Some speak of it as trust or confidence; some call it a kind of capital; some refuse to define it and content

themselves with roundabout descriptions. If a definition is desired, credit may be said to be an exchange or a transaction which consists in the temporary transfer of the usance of wealth. The wealth may consist of concrete goods, or a fund of money, or a mere right or privilege. In modern times most of the wealth so transferred has come to consist of money or the right to demand money; so that credit nowadays primarily implies a temporary transfer of money or of rights to money. In the particular phase of the subject with which we have to deal in this treatise, the other element, namely, the transfer of goods or commodities themselves rather than of the money involved, has come to the front.

We must be careful not to confuse the legal with the economic conception. Legally, if we part with the ownership of anything, it is a sale; if we part with the possession, while retaining the ownership, it is a loan. Economically, the essence of credit is the temporary usance of wealth. A sale on credit is, from the economic point of view, no sale at all. Legally, the ownership is transferred and the payment is deferred; economically, it is a grant to the purchaser to utilize the commodity subject to the prior economic right of the seller to have a certain sum of money returned to him. The economic alienation does not become complete until the payment of the money is effected; that is, until the credit expires.

From this fundamental fact flow three consequences:

(1) Since the transfer is temporary, it must terminate at a future date. The loan must be repaid; and if in the meantime the subject of the loan has disappeared, its economic equivalent must be returned.

(2) Whenever commodities are loaned and payments are deferred until the expiration of a certain period, there is, strictly speaking, a case of credit. It is imma-

terial, however, from this point of view, whether the commodity is loaned or whether the loan consists of a sum of money or other purchasing power. If the commodity is transferred with the intention that the commodity itself be returned, we have the case of an ordinary loan. If, on the other hand, not the particular commodity itself, but its equivalent, is to be returned, the thing which has been loaned becomes the property of the borrower and payment therefor must be made to the seller. In all such cases credit becomes virtually a contract for the future delivery of money or money's worth. The commodity or purchasing power or control of wealth is turned over at once; the payment therefor takes place in money or in money's worth or in purchasing power in the future.

(3) The lender must trust the ability of the borrower to meet the obligation at a stipulated date. Since the transaction consists of the exchange of present purchasing power for future or potential purchasing power, all credit rests on confidence. Without the trust that the borrower inspires in the lender, there can be no credit.

The essence of credit then is the right to utilize something, whether commodities or money or money's worth, the ultimate economic title to which belongs to another. In all forms of credit the use or enjoyment is in the present, the payment is deferred to the future.

Instalment selling, however, involves a particular kind of credit. Like all credit, instalment credit implies the present transfer of wealth, depends upon the trust or confidence reposed in the debtor, and is based upon the expectation of repayment in the future. The difference between instalment credit and other credit is to be found in the fact that instalment credit is liquidated piecemeal or in successive fractions rather than in a lump sum. Whatever strength or weakness instalment

selling, as a distinct form of credit, possesses is ultimately traceable to this characteristic of piecemeal, as contrasted with lump-sum, liquidation. But it can not be too much emphasized at the very outset that instalment credit, even with its peculiar piecemeal method of liquidation, is still only a subdivision of credit in general. In instalment selling, as in credit generally, the underlying and fundamental bases are confidence and the capacity and desire of the borrower ultimately to repay the loan.

Instalment selling, as we have learned, involves a system of fractional payments. It must be pointed out, however, that fractional payments are of two essentially different kinds—synchronous and successive; and that only the latter kind involves credit.

The most common example of synchronous fractional payments is found in our corporate life. One of the essential elements of the modern corporation is the collection of capital in fractional sums from the shareholders. The capital stock, in other words, instead of being provided in a lump sum by one individual, as is commonly the case in a private business, is secured by the device of dividing up the capital into shares of stock and selling these fractional shares to individuals. A modern variety of this system of synchronous fractional payments is found in the purchase of land and in the financing of houses. Although this is a very recent development in the United States, it is of extreme antiquity. A distinguished German scholar has pointed out that in the early Roman Empire this became the common method of dealing speculatively with plots of land not only in the cities but in the country.[1] In the same way we find the financing of houses both in Rome and in the medieval cities rendered possible through the

[1] Max Weber. *Die römische Agrargeschichte in ihrer Bedeutung für das Staats-und Privatrecht*. Stuttgart, 1891, pp. 98–106.

application of this principle whereby a number of individuals are grouped together in order to furnish the means of payment.

This form of fractional payment, although now widespread, does not necessarily involve any use of credit. But when the fractional payments are made successively or at intervals, credit at once emerges, because an interval implies the lapse of time and the time element is of the essence of credit. Successive fractional payments, as distinguished from synchronous fractional payments, involve a credit transaction.

2. Instalment Credit in Public Transactions

Instalment credit, which is as old as credit itself, may furthermore be distinguished in so far as it is found in public or in private transactions. The public transactions which involve the use of instalment credit may again be subdivided in so far as the payments are made to the government or by the government.

The use of instalments in payments to the government is found in either compulsory or contractual payments. The most familiar case of compulsory payments from individuals to the government, arranged on the instalment plan, is that of taxation. From the dawn of history down to the present, the obligation resting on the individual to support the government by the compulsory payments known as taxes has frequently been so arranged as to permit the individual to pay in instalments. The total sum is fixed at the outset, but permission is granted to pay in successive fractions. Sometimes, as in the case of the income taxes and the real estate taxes of the United States, the instalments are two, three or four in number; in other cases more or less familiar throughout the world, the number of instalments is considerably greater. It is perhaps open to

doubt whether instalment tax payments ought to be called instalment credit. But the doubt does not exist in the application of the method to special assessments, where in some of our states the successive fractions amount to ten or fifteen in number and may be spread over a considerable series of years.

The system of instalments which began with compulsory payments to the government soon spread to contractual payments. When the government has things to sell, it frequently applies the instalment method. This is as old as government itself. In the United States we have only to refer to the disposition of our public domain and to the political controversies which at various times revolved around the question of sales on credit as over against sales for cash. The system of paying for land purchases in instalments has been a familiar one with us. A more recent use of this system is found in connection with irrigation methods. Under the various reclamation laws, notably those of 1902 and 1914, the gigantic reservoirs in the northwest and southwest of the United States, in which the water is impounded and delivered to the farm owners in quantities suitable to their needs, are paid for in successive increments running over as much as twenty years. Examples of instalments of an analogous nature could easily be multiplied. An interesting and more recent type of instalment sales resting on contractual payments from the individual to the government is the marketing of Liberty Bonds during the Great War. In view of the colossal sums needed and the severe burden which would have rested upon the purchasers if they had been required to pay for the securities in a lump sum, the system of payment in instalments was introduced and was singularly successful in effecting the desired result.[1]

[1] Cf. John Muir. *The Birth of American Thrift; The Partial Payment Plan in the Purchase of Liberty Bonds.* Washington, 1917.

As over against these examples of instalment selling by governments, involving either compulsory payments or contractual payments on the part of the individual purchaser, we have another category of public transactions on the instalment system involving payments not by the individual but by the government. In all such cases the commodity or the wealth is turned over by individuals to the government, and the government which receives this wealth obligates itself to pay for the same in instalments. The great examples of such transactions are to be found in the domain of public credit.

The earliest form of such transactions is seen in the beginnings of public credit itself. The first public loans, as in the Italian towns of the early Middle Ages, were compulsory loans. Certain individuals were selected by the government, compelled to advance moneys, and then directed to form themselves into an association or corporation, each of the contributors receiving a proportionate share in the association.

This corporation, or bank as it was called, was entitled to receive in the future certain current annual revenues which were to be turned over from time to time to the shareholders. Before long, the city governments, instead of specifying definite revenues earmarked for this purpose, simply promised to pay to the individual lender certain sums every year. These annual payments, or annuities, as they were termed, were so arranged that, at the expiration of a certain date, the payments, which included both interest and amortization, should satisfy the entire claims of the lender. The system of government annuities has lasted to this day, and it was at one time the usual method of borrowing. It would take us too far afield to explain the reasons why the United States has abandoned this method, which is still customary abroad.

When the system of borrowing by what was formerly called government stock, or what we now call government bonds, came into use, the method of instalment selling was also frequently applied. While in this country most of the bonds until recently were of the so-called "straight" variety, whereby the government repays the loan in a lump sum on a certain date, we have had numerous examples both here and abroad of the loans redeemable by periodical payments. Moreover, the modern device, which is rapidly becoming widespread in this country, of serial bonds is another example of the system of instalment payments.

3. Instalment Credit in Private Transactions

While an early use of instalment credit was therefore to be found in public transactions, it was not long before the advantages of the method were recognized as applying also to private transactions. Perhaps the leading illustration of this form of instalment payments is found in the transfer of the rights of wealth involved in the insurance business. The life insurance business is an outgrowth of the system of government annuities. Although the methods were at first primitive, and the system itself only partially successful because of the defective tables as to the expectation of life, the principles involved were sound; and the more refined mathematical methods and the greater complications of modern existence have contributed to a prodigious increase of this form of business. At the close of 1924 there was outstanding in the entire world life insurance of about ninety billions of dollars. Of this amount, over two-thirds or 63,300 millions was held in the United States. The life insurance premiums are paid in instalments from year to year, and when death occurs the capital sum is paid over. It is, of course, equally

possible and quite common for the individual to reverse this process, i.e., to pay over a capital sum at present and to acquire in return the right to receive periodically until death or for a term of years a definite sum or instalment. The life insurance business is based on instalment payments.

The system has spread to fire insurance and to many other forms of insurance. It may be pointed out that, in so far as marine insurance is concerned, the utilization of this method goes back to very early times, even, in fact, to the Babylonians and Phœnicians.[1]

All the various forms of insurance involve the use of instalment credit as applied to money or the rights to money. Of equally great antiquity, however, is the use of instalment credit when applied to the transfer of actual tangible wealth.

The earliest form of such instalment credit is found in connection with real estate, both lands and houses. Recent researches have revealed the widespread character of such transactions in Egypt.[2]

More familiar are the methods employed in Rome. Plutarch tells us that Crassus at one time owned half of all Rome, being accustomed to buy up the houses in the case of great conflagrations, when the owners had given up all hope, and thereupon selling the property on the instalment plan. A German scholar has described to us in detail similar speculative activities in other great cities of classical antiquity.[3] In the Middle Ages also this was a familiar method, as was the even more widespread system of the purchase of rent charges or loans repayable in periodic annual sums consisting of reser-

[1] For an excellent account of early forms of insurance, cf. C. F. Trenerry. *The Origin and Early History of Insurance, including the Contract of Bottomry.* London, 1926.

[2] *Greek Papyri in the Library of Cornell University.* Edited by W. L. Westermann and C. J. Kraemer, Jr. Columbia University Press, New York, 1926.

[3] Robert Pöhlmann. *Die Ueberbevölkerung der antiken Grossstädte im Zusammenhang mit der gesammten städtischen Civilisation.* Leipsic, 1884.

vations from, or charges upon, the annual rents of real estate.

In our modern American life there have been two notable types of instalment sales as applied to real estate. The first is found in our building and loan associations to whose efforts is due a not insignificant part of all the homes constructed in the United States. As a discussion of this topic is really not germane to our study, we relegate it to Appendix One, published in the companion volume, where there will be found a treatment of its history and actual methods. We content ourselves here with stating that the assets of the building and loan associations at the end of 1925 amounted to about five and one-half billion dollars, a sum that must be credited very largely to the system of instalment payments.

The other form of instalment selling in real estate is found in connection with the more recent financing of buildings and especially of co-operative apartments in our cities, and with suburban properties. Indeed a whole new science has arisen in connection with this subject of real estate financing, and the literature has become an enormous one. Here also the discussion has been relegated to Appendix One. Without going into details of a subject to which a whole volume might be devoted, it will suffice to state that the amount of instalment selling both of real estate itself and of securities resting on real estate aggregates sums which, even conservatively estimated, run into the billions of dollars. It may be stated without fear of criticism that, of all modern forms of instalment selling, real estate instalment credit is by far the most important and the most complicated.

The final form of instalment selling is seen in transactions involving the transfer of ordinary merchandise known as goods and chattels. This also is of consider-

able antiquity, and is found almost from the beginning when in particular cases it was inconvenient for the purchaser to make his deferred payment in one lump sum. With the progress of modern industry, this practice of fractional payment spread to a considerable variety of commodities. Most of these articles were purchased in the ordinary form of business and were thus utilized for purposes of production. In the United States this method has been more or less common for over a century, and has been applied to commodities which range in importance from those of slight value to printing presses and railway equipment. Instalment selling of this kind was a more or less usual concomitant of many forms of production credit, and is still not uncommon today. Some of the large credit or finance companies that deal in instalment paper at present even limit themselves to these various forms of production credit.

Side by side with this development of production credit came the application of instalment selling to consumption credit, that is, to credit granted to the individual for consumable goods rather than to the ordinary business man for production purposes. This form of instalment credit is, as we shall see in the next chapter, also of great antiquity. But in the past its scope was restricted and its application was limited. It is only much more recently that instalment selling to the consumer has attained great proportions, and in this development the instalment sales of automobiles have acquired the first place. When people ordinarily speak of instalment selling at the present time, they almost always refer to instalment credit as applied to articles of consumption. It is to this aspect of the subject that we wish to address ourselves. We propose to study instalment selling primarily as a part of consumption credit. It cannot, however, be too strongly emphasized

that instalment selling in this sense forms only the final example of a system which is found almost from the beginning of civilization, and which is no less important in public transactions than it has become in private life.

CHAPTER II

HISTORY OF MODERN INSTALMENT SELLING

LIMITING ourselves therefore to transactions in personal property or ordinary commodities, and passing over the history of such transactions in ancient and medieval times, we shall content ourselves with attempting to describe the modern development of what is today commonly known as the system of instalment selling.

The modern history of instalment selling may be divided into several stages:

1. The early high-grade business.
2. The low-grade business.
3. The origin of automobile instalment selling.
4. The development of the finance company.
5. The spread of instalment selling to other commodities.

1. EARLY HIGH-GRADE INSTALMENT BUSINESS

It seems, so far as can be ascertained, that instalment selling of commodities was introduced into this country in the year 1807 by the New York founder of the house of Cowperthwait and Sons, which still exists today. It is said, although it is of course impossible to verify the assertion, that the suggestion was given by a lady who had returned from Paris where the system had long been in vogue in the establishment of Dufayel. It was applied first to furniture, but it soon spread to other businesses carried on in New York by Cowperthwait's as well as by similar concerns, like Ludwig Baumann and

Company, and Jordan Moriarty and Company. Gradually it was applied in other cities as well. Some of these enterprises deal at present not only in furniture, but in carpets, bedding and, in short, "everything for housekeeping."

As the business developed, it spread to the medium and lower-priced articles. The larger furniture houses have been cautious in their selection of risks, and have endeavored to restrict their sales to responsible purchasers who are in receipt of fairly large incomes. Many of the customers have, however, been wage-earners or professionals in receipt of a modest salary. In the larger houses it is reported that the number of customers who are dependent upon wages and salaries amounts to about 90 per cent of the whole, the remaining 10 per cent being composed of small business men. People in more easy circumstances have little reason to resort to the instalment system. All manner of rules designed to reduce the financial irresponsibility of the customers were, and still are, found in some of the larger enterprises. Some houses exclude certain classes of the population, others certain races, still others inhabitants of certain sections, and so on.

The typical sales by these larger houses vary from small amounts like five dollars to large sums like several thousand dollars, the average before the Great War being about seventy-five to a hundred dollars. The contract with the customer takes the form of a lease or chattel mortgage, the seller always reserving the right to recover the goods in case of default, without returning any part of the instalments paid in. With the better furniture houses, a down payment of about 10 per cent is required, and the normal maximum period of credit is about eighteen months. In practice, however, payments often run over this time. Owing to the great care in the selection of the purchasers, losses from dis-

honesty are comparatively uncommon, the default being generally due to unforeseen contingencies.

The better instalment houses in the furniture business are exceedingly liberal with delinquent purchasers. They exhaust all other possibilities before taking back the goods and they do this as a matter of business, with a view of maintaining their high reputation. Even if they are finally obliged to take back the goods, they not infrequently leave a considerable fraction of the furniture to cover a large part of the money that has been paid in. As a consequence, instalment selling in the high-grade furniture business has not only been profitable to the firms that conduct the business, but has also been a distinct advantage to the purchaser.

The sewing machine business was the next to which the system was applied. The Singer Sewing Machine Company began to sell its product on the instalment plan about the middle of the nineteenth century, and the system soon spread to its competitors. The essential difference between the furniture trade and the sewing machine trade is that in the latter case the sales were made very largely by itinerant agents. This is partly responsible for the early growth of some abuses. Not only was it possible, and not unlikely, for particular salesmen to exercise undue persuasion in order to dispose of their wares, but the clientele was composed largely of purchasers a little less well-to-do than the furniture customers. It must also not be forgotten that the sewing machines were at first bought almost exclusively by the women of the family.

It is accordingly not surprising to find that the losses both of money and of property became somewhat more frequent, and that the cases of hardship and injustice became somewhat more common. Under the former law in New York, the legal remedies consisted not only of replevin of the article, but of bodily execution on the

defaulting purchaser. In not a few cases resort was taken to such execution.

A machine worth from twenty-five to thirty-five dollars could usually be bought with a down payment of one dollar and a weekly payment of fifty cents, although in some of the more expensive machines proportionately higher figures were found. The maximum time of credit might therefore run to a period well over a year. When the sale of sewing machines spread to more or less impecunious tailors, and especially under the old sweating system in our large cities, the risks became greater and some of the abuses correspondingly more pronounced. In the main, however, even though the class of customers was somewhat inferior to that of the furniture houses, the instalment sales in the sewing machine business might still fairly be included in the high-grade system.

The third to develop in the high-grade instalment group was the piano business. In this, instalment selling began about half a century ago, and has become today almost the universal method of making sales. Inasmuch as pianos are an expensive commodity and are bought chiefly by people in a higher stratum of society, the abuses are far less. With a high-grade piano costing one thousand dollars, a down payment of at least one-third and sometimes more was required, with a correspondingly large monthly payment, so arranged as to liquidate the transaction in from two to three years. When a department store a few decades ago advertised a piano for one hundred and fifty dollars with five dollars down and a balance of one dollar a week, the better grade of manufacturers contemptuously characterized this system of trying to popularize the instalment method as "nothing down and nothing a week thereafter." A large department store in New York at present is said to have built up piano sales of

about three millions a year on somewhat similar practices.

In the piano business the contract takes the form of a lease. Owing to the relatively high price of the commodity and the grade of customer, comparatively little difficulty has been encountered. Repossessions are, however, by no means uncommon. A special study of some features of the piano instalment business will be found in Appendix Four in the companion volume, under the head of the Merchandise Study.

The final category of the early high-grade instalment business is to be found in the case of books. This system has gone through several stages described in detail in Appendix Four. The first plan, as introduced in England about 1800, was to solicit subscriptions to sets before publication and to collect cash in advance. The second step was to invite subscriptions in advance and to collect cash as the volumes were delivered one by one. The final method was introduced about the middle of the nineteenth century when the technique of printing had improved so as to make rapid production possible. It consists of the plan to deliver the full set at once and then to collect by instalments. Since 1900, moreover, we note a great increase in the number of itinerant book agents selling individual volumes, a practice in connection with which not a few abuses have appeared. The book instalment business stands about midway between the sewing machine and the piano business in respect to both the value of the commodity and the grade of the purchaser.

Summing up, it may be said that the origin of the high-class instalment business was due to the legitimate desire of the dealer to augment his sales by enabling purchases to be made by those who could not afford to pay either cash down or a lump sum after a reasonable period of credit. The business, being conducted by

responsible dealers and, in the main, for responsible purchasers, has been not only a profitable but a useful form of extending credit. Some of the general problems involved in the possible over-extension of these more or less familiar methods will be treated hereafter.

2. Low-Grade Instalment Business

The extension of the instalment business to a lower grade both of commodity and of purchaser was of somewhat later development. In the city of New York it was largely the product of the closing decades of the nineteenth century. The characteristic feature of this business is that it was carried on primarily by the so-called peddlers who acted either as "pullers-in" or as peddler dealers, carrying the goods around from house to house. Instead of a small number of large houses, we have a large number of small dealers. The great mass of the customers are found among the very poor. The commodities dealt in include not only furniture, household wares and sewing machines, but also clothing, steamship tickets, and, in general, articles of every description usually bought by the poor and the immigrant.

In New York City these peddlers are of three classes: custom peddlers, instalment peddlers proper, and peddler dealers.

The custom peddlers have no shops and sell their goods without any written contract, upon the customer's verbal agreement to pay a stated amount per week. In the absence of a contract, it is to be presumed that these peddlers are fairly careful in their selection of risks. Very little is heard of them in the courts. To this extent they may be supposed to be doing a business which is not only fairly profitable, but also fairly serviceable to the customers. Resting largely upon per-

sonal acquaintance or other primitive methods of credit investigation, they are doing in a small way what the bigger firms do in a large way. This system of custom peddlers is probably only a survival of very ancient conditions.

As over against the custom peddlers, we have the instalment peddlers proper, among whom are to be found the so-called "pullers-in." These stand, of course, upon a distinctly lower plane of honesty and integrity, and ply their business primarily among the ignorant and impecunious, thus giving opportunity for the development of all manner of abuses.

The third class, or peddler dealers, are dealers in all but name. They have no shops, but buy goods from the wholesalers and then sell under their own name on instalments. Their shops are "under their hats," or, at best, in their living apartments, and it is chiefly out of their ranks that there has been recruited the so-called "fake" instalment business, which was studied over two decades ago by one of my former students.[1]

The "fake" business dealt primarily with jewelry and watches, books, ornamental wares like vases and fancy clocks, photographs and gewgaws. Most of these transactions represented conscienceless deceit and actual thievery, resting upon the body execution permitted by the law, and resulted in the most outrageous practices. With the change in the law which partially abolished the system of body execution,[2] this so-called "fake" busi-

[1] Henry R. Mussey. *The "Fake" Instalment Business; being an Outline of Its Development, and an Account of the Revival of the Imprisonment for Debt and of the Other Outrages Practiced by Dealers under Cover of the Law, together with Suggestions for the Destruction of the "Fake" Trade.* Published by the University Settlement Society, New York, 1903.

[2] In cases involving fraud and deceit on the part of the purchaser, the right to body execution still exists. Furthermore, it is also still found in certain civil cases. In the case of a wage-earner whose claim does not exceed the sum of $100, and whose action is commenced within ninety days from the date on which it accrued, the plaintiff is still entitled to a body arrest against the defendant where the judgment recovered in the action is unsatisfied.

ness has been largely eliminated in the city of New York, although it is not at all improbable that it is found to some extent in some of our other crowded centers.

Although the old "fake" instalment business as such has largely disappeared, there still remain practices in the instalment business in the city of New York which are closely analogous. This is particularly true in the case of furniture and of jewelry.

One of the common forms of operation in the furniture business is in connection with the so-called club plan. This is a scheme whereby the agents or collectors of the company, soliciting for customers in the poorer parts of the city, induce the purchaser to sign a contract whereby he agrees to pay 25 cents a week until he has paid the sum of $17.50, at which time he is entitled to select certain articles presumed to correspond to that value. These contracts contain a peculiar feature to the effect that a drawing is held weekly and that the owner of the lucky number has delivered to him at once furniture of the supposed value of $17.50 without the necessity of making any future payments. When the Legal Aid Society of New York investigated this matter in 1915, it ascertained that 13,000 such lottery contracts were outstanding. As a result of their interference, a fairly satisfactory adjustment was made.[1] The Legal Aid Society reports that at present it still receives a fairly large number of complaints against certain furniture houses which sell on the instalment plan. Among the chief causes of dissatisfaction is the complaint that the furniture selected is not the furniture delivered, or that the articles actually delivered are in very poor condition.

In the case of the jewelry concerns also, it is frequently found that the article selected is greatly overvalued by

[1] Cf. Leonard McGee. "Thirteen Thousand Furniture Victims." *Legal Aid Review*, April, 1915.

the dealer, and that the aggregate of instalments paid by the customer is out of all proportion to the real value of the article in question.

It is evident, therefore, that despite the virtual disappearance of the "fake" business, numerous examples of abuses are still found in our larger cities in connection with the low-grade instalment business, primarily in furniture and jewelry, but also in other lines of commodities that are bought hand-to-mouth by the poor. These existing abuses, which form the staple of the complaints observed by our philanthropic associations and Charity Organization Societies,[1] must undoubtedly be set over against the advantages of the high-grade business.

3. Origin of Automobile Instalment Selling

A very different picture is presented by the advent of instalment sales as applied to the automobile. The automobile is almost entirely the result of the last twenty-five years. Starting out at the close of the nineteenth century with a few machines imported from Europe and primarily from France as articles of luxury for the very rich, the automobile industry grew so rapidly from these humble beginnings that it has become today the greatest of all American industries, supplying what to many classes indeed has come to be considered a necessity. A few statistics illustrating the rapid growth and present conditions of the industry may be given here.

In the census of 1923 the automobile industry, which a decade before had been of comparatively little importance, assumed the first place in the country's production. This is shown by the following figures of the ten largest industries of the country:

TABLE I

COMPARATIVE VALUES OF LEADING INDUSTRIES OF THE UNITED STATES

Industry	Wholesale Value in the Year 1923
1. Motor vehicles	$3,163,327,874
2. Steel works and rolling mills	3,154,324,671
3. Slaughtering and meat packing	2,585,803,888
4. Foundry and machine shop products	2,337,807,997
5. Cotton goods	1,901,125,703
6. Petroleum refining	1,793,700,087
7. Lumber and timber products	1,494,259,321
8. Electrical machinery, appliances and supplies	1,293,001,751
9. Printing and publishing	1,268,501,566
10. Bread and other bakery products	1,122,834,099

More interesting, perhaps, are the figures which disclose the annual growth of the industry, including both passenger cars and motor trucks, and giving an indication also of the total number of automobiles registered in the United States. There are now over twenty-two million automobiles in the country or one automobile to every six persons. The figures appear on the following page.

TABLE II

PRODUCTION OF MOTOR VEHICLES IN THE UNITED STATES AND CANADA*

	Number			Wholesale Value in Thousands of Dollars			Registration in the United States
Year	Passenger Cars	Trucks	Total	Passenger Cars	Trucks	Total	Total Cars and Trucks
1900	5,000						8,000
1901	7,000						14,800
1902	9,000						23,000
1903	11,235						32,920
1904	22,419	411	22,830	$ 23,682,492	$ 946,947	$ 24,629,439	55,000
1905	24,550	450	25,000			40,000,000	78,000
1906	33,500	500	34,000			62,900,000	107,000
1907	43,300	700	44,000			93,400,000	142,000
1908	63,500	1,500	65,000			137,800,000	197,500
1909	127,731	3,255	130,986	159,918,506	5,230,023	165,148,529	312,000
1910	181,000	6,000	187,000	213,000,000		225,000,000	468,500
1911	199,319	10,655	210,000	240,770,000	22,292,321	262,500,000	639,500
1912	356,000	22,000	378,000	335,000,000	43,000,000	378,000,000	944,000
1913	461,500	23,500	485,000	399,902,000	44,000,000	425,000,000	1,258,062
1914	543,679	25,375	569,054	413,859,379	45,098,464	458,957,843	1,711,339
1915	818,618	74,000	892,618	565,978,950	125,800,000	691,778,950	2,445,666
1916	1,525,578	92,130	1,617,708	921,378,000	166,650,273	1,088,028,273	3,512,996
1917	1,740,792	128,157	1,868,949	1,053,505,781	220,982,668	1,274,488,449	4,983,340
1918	926,388	227,250	1,153,638	801,937,925	434,168,992	1,236,106,917	6,146,617
1919	1,657,652	316,364	1,974,016	1,461,785,925	423,326,621	1,885,112,546	7,565,446
1920	†1,883,158	†322,039	2,205,197	1,809,170,963	423,756,715	2,232,927,628	9,231,941
1921	†1,514,000	†147,550	1,661,550	1,093,918,000	166,082,000	1,260,000,000	10,464,715
1922	†2,406,396	†252,668	2,659,064	1,567,003,041	222,635,324	1,789,638,365	12,239,853
1923	†3,694,237	†392,760	4,086,997	2,276,399,270	311,144,434	2,587,543,704	15,092,177
1924	†3,243,285	†374,317	3,617,602	2,011,038,288	317,027,716	2,328,066,004	17,593,677
1925	†3,839,302	†497,452	4,336,754	2,523,642,558	454,262,275	2,977,904,833	19,954,347
1926	....	....	....	....	....	....	22,342,457

* *Source:* National Automobile Chamber of Commerce. † Includes Canadian Production.

It may also be of interest to add a few statistics showing the present extent of the industry. The following table of persons employed in the automobile industry in 1926 shows a total of almost three and a half million, comprising those employed directly as well as indirectly.

TABLE III

COMPARATIVE STATEMENT OF NUMBER OF WORKERS EMPLOYED IN THE AUTOMOBILE INDUSTRY

Employed Directly		
Motor vehicle factory workers	361,442	
Parts and accessory factory workers	350,000	
Tire factory workers	120,000	
Motor vehicle dealers and salesmen	196,000	
Supplies, accessories and parts dealers and salesmen	140,000	
Garage employees	115,000	
Tire dealers and salesmen	95,000	
Repair shop employees	480,000	
Professional chauffeurs	475,000	
Professional truck drivers	800,000	
Gasoline refinery and oil workers	60,000	
Automobile financing and insurance	12,000	
Total directly employed		3,204,442
Employed Indirectly		
Iron and steel workers	65,000	
Copper, lead, tin, nickel, and aluminum workers	14,000	
Railroad workers	90,000	
Plate glass workers	12,000	
Tannery and leather workers	10,000	
Woodworkers	25,000	
Upholstering cloth, top and side curtain material workers	20,000	
Asbestos workers	700	
Paint and varnish factory workers	1,500	
Coal miners	3,000	
Total indirectly employed		241,200
Grand total		3,445,642

The figures for the various industries are based on the percentage of total output of product consumed by the automobile industry. No estimates have been attempted

for the number of people on road construction work, manufacturing of machine tools and other production equipment, extension of automobile plants, etc.

The capital invested in the manufacture of automobiles is shown in the following table which is made up of the tangible assets in the factories within the United States. It will be seen that, in the seven years in question, the capital invested in passenger cars well-nigh doubled.

TABLE IV

TANGIBLE ASSETS OF UNITED STATES AUTOMOBILE FACTORIES

Year	Passenger Cars	Trucks	Total
1919	$ 784,660,761	$230,782,577	$1,015,443,338
1920	897,953,600	306,425,000	1,204,378,600
1921	1,134,166,000	289,334,000	1,423,500,000
1922	1,154,103,335	302,546,620	1,456,649,954
1923	1,281,364,300	290,358,100	1,571,722,400
1924	1,373,372,426	317,677,686	1,691,050,112
1925	1,503,290,062	384,738,748	1,888,028,810

During these same years, while the number of automobile factories increased by more than 50 per cent, the wages paid more than doubled. This appears from the following table:

TABLE V

EMPLOYMENT AND WAGES IN MOTOR CAR AND TRUCK FACTORIES OF UNITED STATES

Year	Number of Workers Employed	Wages
1919	210,559	$312,165,870
1920	244,700	490,160,000
1921	186,000	299,098,780
1922	253,104	395,707,531
1923	318,098	579,002,686
1924	329,563	547,215,700
1925	361,442	649,668,829

It may be well to add two tables which show the consumption of rubber and of gasoline. In the case of rubber, indeed, it must be remembered that it is used for other purposes than for tires; but the automobile demand is far and away of paramount importance. The following table shows the world production and the United States consumption of rubber:[1]

TABLE VI

WORLD PRODUCTION AND UNITED STATES CONSUMPTION OF RUBBER
(RECKONED IN LONG TONS)

Year	World Production	United States Consumption
1915	169,017	96,794
1916	210,079	116,418
1917	277,938	177,089
1918	217,511	142,772
1919	398,998	236,977
1920	341,135	248,763
1921	300,649	179,678
1922	406,110	296,267
1923	406,423	300,373
1924	418,600	317,743
1925	505,000	381,815

Gasoline, again, is in very much the same position as rubber: while it is used for many other purposes, the consumption for automobiles constitutes an overwhelming proportion of the whole. The following table[2] gives the figures for the United States. From this it will be seen that, in the six years in question, the consumption of gasoline has more than doubled, and that the utilization for internal purposes leaves but a comparatively small balance for export.

The revolution in the automobile industry was accomplished shortly before our entrance into the Great War.

[1] *Statistical Abstract of the United States for 1925.* Washington, 1926, p. 673.
[2] *Ibid.*, p. 735.

TABLE VII

MARKET MEASURES OF GASOLINE IN THE UNITED STATES
(RECKONED IN THOUSANDS OF GALLONS)

Year	Production	Imports	Exports	Consumption	Stocks
1920	4,882,547	40,478	656,740	4,250,696	462,382
1921	5,153,549	37,816	551,633	4,516,027	586,087
1922	6,202,235	62,133	594,576	5,372,085	883,793
1923	7,555,945	191,314	871,117	6,685,035	1,074,900
1924	8,959,680	145,023	1,219,474	7,780,625	1,179,503
1925	10,886,127	160,137	1,330,314	9,362,094	1,648,328

The prodigious increase in production and the lowering of prices led to continually newer classes of users. With this change came the need of some alteration in the methods of sales and the disposition of the product. In the older days, when the automobile was an article of luxury and bought only by the very wealthy, cash was virtually the only method available or desirable. But when the would-be purchasers came to be predominantly of the middle and lower middle class, and when it became more and more customary for the farmer and even the more prosperous wage-earner to desire a motor car, an opportunity arose to introduce some method to enable purchase on the part of those who had no great stock of accumulated savings or who, at all events, would find it inconvenient to pay in cash. The ordinary man of modest means who had learned how to construct his home through the building and loan associations, and who had had a more or less fortunate experience in buying the necessary furniture for his home through the instalment method, regarded with favor this way of adding to his possessions what he now considered only next in importance to his house and his furniture.

There was, however, another reason for the develop-

ment of the new sales method—a reason connected with the dealer rather than with the consumer. The automobile business was at the outset a highly seasonal business. Especially in the early days before the advent of the great popularity of the closed car, the automobile sales were massed in the early spring and summer. With the gradual development of the volume of sales, the manufacturers began to realize what has long been a commonplace in economic theory and what has been the lesson of experience in business practice, that the advantages of mass production, which would render possible a lowering of the price and a capture of the market, were more or less dependent upon an even and continuous output. It is obvious that where seasonal production of any commodity is marked, the non-utilization of the plant and the laying-off of workmen conspire to increase costs and to interpose difficulties in the successful prosecution of the enterprise.

If now the distributors or wholesale dealers in the automobiles found, as was increasingly true, that the retail dealers were able to dispose of their cars only in certain months of the year, the problem of what to do with the accumulated stock became a serious one. If the demand on the part of the dealers was essentially seasonal, the demand of the distributors would become correspondingly seasonal, and the manufacturers would be confronted by the problem of securing an even flow of their output. For the individual dealers to purchase cars and to store them in anticipation of the demand was out of the question; their capital was inadequate. For the distributors to step into the breach and to pay cash for large quantities of automobiles which they would have had to put in storage would have meant useless expenditures for storage facilities. A continuance of the old system, therefore, implied a rather rigid limitation on the possibilities of output. What was

more natural, then, than that there should occur to some ingenious minds the thought that if a method could be devised for replacing the system of cash sales, the problem would be solved? If the distributors could be permitted to pay for the accumulating stock of automobiles only as they periodically disposed of them, the difficulties of the situation would be largely overcome.

In this way, the two converging streams of influence, namely, the desire of the automobile user to be provided with a somewhat easier method of payment, and the interests of the automobile manufacturer to secure a larger as well as an even, uninterrupted flow of output, conspired to bring about the introduction of the instalment method.

Since the origin of instalment sales in automobiles is due to these two reasons, it becomes necessary to explain somewhat more in detail the influence of each.

So far as the consumer is concerned, cash was the well-nigh universal rule up to 1910. Of course, here and there isolated instances were to be found, as in the sale of everything else, where the dealer made, largely for personal reasons, some credit concession to purchasers. But these instances were sporadic. With the growth in the number of automobiles, and in the desires of a continually growing group of more or less modest purchasers to secure automobiles, the custom arose of buying used instead of new cars—a custom strengthened by certain factors on the supply side as well. With the increase in the used-car business, the pressure upon the dealers to make some concessions to the buyer became stronger. From the year 1910 on, we find such concessions growing, especially on the Pacific Coast, where the climate rendered possible the utilization of automobiles for a considerably more protracted period than in the rest of the country, and where the good roads first made their appearance. Within the next two

or three years, the system of making concessions in the way of time payments became quite common, and it had in the meantime been applied to new cars as well. Although the methods differed considerably from dealer to dealer, and although the terms were even more heterogeneous, the purchasing public was gradually accustoming itself to pay for the cars, whether new or used, in successive instalments, chiefly in monthly payments.

The problem now arose as to how the dealer could contrive to pay cash to the manufacturer for the cars which he was now beginning to sell on instalments. He might indeed, and did in fact at first, turn to his local bank and endeavor to discount some of the notes turned over to him by the purchasers. But difficulties soon disclosed themselves. The dealer might not have been of unimpeachable credit or in possession of a credit rating such as that to which the local bank had been accustomed; and even where the dealer's own credit was good, he had in most cases no organization adequate to guarantee the solvency of the customer and therefore the standing of the notes turned in. Moreover, as many of these purchasers' notes ran for a considerable number of months, this paper was essentially lacking in the element of liquidity which the banks were accustomed to demand. Above all, there emerged the problem of collecting the unpaid instalments; and the local bank was often both unable and unwilling to institute a new and expensive department to oversee the delinquent purchasers. The relations between the dealer and the purchaser, therefore, inevitably called for some form of credit mechanism, adequate to this new method of instalment selling.

More important, naturally, was the pressure brought to bear by the arrangements between the distributor and the manufacturer. Here, also, up to this period, it had been customary to sell automobiles strictly for

cash, with the exception of isolated cases, as in all similar businesses, where the manufacturer made concessions to particular dealers and carried part of the stock on an open account during the slack months of the year. Such examples were, however, uncommon. But now, with the increasing pressure exerted upon the distributors by the manufacturers, the former realized that their capital was not sufficient. In an industry where so long a time elapses between the beginning and the end of the productive process, that is, between the purchase of the raw material and the final disposition of the finished product, the question of delay in payment becomes of prime importance. Even in an industry with a fairly large capital, it becomes embarrassing to have a large part of the funds tied up. If thousands of cars are to be manufactured and then indefinitely stored until called for by the seasonal demand, a decided limit is set to the output. Neither the distributor nor the manufacturer could secure much help from the local bank, partly for reasons explained above and partly because of the fact that, if the banks were to be adequately remunerated for this new service, they would have to make charges which would probably bring them into conflict with the usury laws in the various states. Furthermore, laws restricting the amount of loans to be made to any one individual frequently resulted in a situation where the dealer could not obtain adequate financing accommodations. The manufacturer not only needed his money at once, but desired a larger, as well as an even and continuous, market for his product; the distributor, unless he was to dissipate his gross earnings in storage expenses and other payments, was under pressure to find buyers for the surplus cars. Something else was needed not only to render liquid the frozen credits which were thus being engendered on all sides, but also

to impart a degree of reasonable safety to the new sales method.

Thus from all the parties to the transaction, manufacturer, distributor, dealer and consumer, there now came a demand for machinery which would render possible a greater volume of transactions. The solution was found in the creation of the so-called credit companies or finance corporations.

4. Development of the Finance Company

In order to explain this, it will be necessary to go back somewhat and to discuss the origins of a practice which soon became of such overwhelming importance.[1]

The practice of borrowing money by pledging open accounts or receivables is an old one. It probably existed in classic antiquity, and it can be traced back to the Hansa towns and the Italian cities of the Middle Ages.[2] When the center of the world's trade was transferred to Amsterdam, the Dutch bankers financed the shipments of tea, coffee, and especially spices, which were shipped from the East Indies by sea around the Cape of Good Hope, whereas the documents ordinarily came overland through India and Persia by the caravan route. As a consequence, the documents were received long before the commodities themselves, and were disposed of by the consignees.

In the United States perhaps the earliest application of this method was when John Jacob Astor financed the documents made out on the shipments of goods in

[1] Although there is no one place in which this development is adequately traced, we may refer to the following literature: William A. Prendergast, *Credit and Its Uses*, New York, 1906; Robert G. Merrick, *The Modern Credit Company, Its Place in Business Financing*, 1922 (a doctoral dissertation at Johns Hopkins University); William A. Grimes, *Financing Automobile Sales by the Time Payment Plan*, Chicago, 1927; Robert Starr Reeves, "The Economic Value of Automobile Finance," in *Automobile Topics*, August, 1926.

[2] Cf. in general for classic antiquity and the Middle Ages the leading work of L. Goldschmidt, *Universalgeschichte des Handelsrechts*, Stuttgart, 1891, Vol. 1.

his clipper vessels from China. The documents were forwarded overland from Astoria, Oregon, and reached New York months before the arrival of the commodities. Soon thereafter the custom arose for banks to advance moneys also to exporters on the so-called documentary bills of exchange, or drafts accompanied by bills of lading, which were drawn on some foreign banker.

This method of financing foreign trade before long spread to internal transactions. For over half a century the textile trade among others has been accustomed to make use of the so-called note brokerage. When a business man needed funds and found it difficult to secure an advance from the local bank, individuals at a distance or in a larger center began to offer their services. The merchant made out his own promissory note, often secured by some of these open accounts or customers' notes as collateral, and turned them over to a broker for disposition. The broker went to his bank or other lender, persuaded the latter of the ultimate safety of the transaction, and succeeded in selling the notes at a certain discount. For this he charged a definite commission. As the business increased, the individual note-broker became a commercial paper house, which soon grew to be expert in its analysis of risks and in its acceptance of the paper. Although the commercial-paper house does not generally indorse the paper in which it deals, its prosperity and ability to handle the business depends on its success in separating the bad from the good risks. And while the bank which discounts the paper usually has an elaborate credit-investigation department of its own, it is obviously influenced to some extent by the character of the note broker or of the commercial-paper house.

Originally all such transactions involved a notification, on the part of the banker or of the person who

advanced the money, to the customer of the business which received the advances. In other words, the individual or company that stepped into the shoes of the original vendor or creditor notified the debtor that the notes would thereafter be payable to him or to it.[1] It was at a much later date that there developed the so-called system of non-notification, which went hand in hand with the evolution of the commercial-paper houses into the newer institutions. These became known under a large variety of names, such as credit companies, discount companies, finance companies, commercial acceptance companies, commercial credit companies, with variations substituting for the word "company" the terms "corporation," "trust," and the like. While they differ among themselves, what is common to them all is that they act as intermediaries between the individual borrowers and the banks.

The earlier credit or finance companies added to the original plan of dealing in customers' notes the practice of buying accounts receivable and trade acceptances. The development of the trade acceptance is to be traced to the inauguration of the federal reserve banks. The originator of the Federal Reserve System, or at all events the one who was responsible for the fundamental idea of combined reserves, Mr. Paul M. Warburg, had always emphasized the desirability of adding to the older form of commercial paper this newer category which was so common in all the European countries.

The first credit company dealing with the assignment of receivables under the non-notification plan and with the issue of collateral notes against the deposit of such receivables was due to two gentlemen, John L. Little and Arthur R. Jones, in 1905. As appears from letters which both of these gentlemen have been good enough

[1] A. E. Duncan. "The Sale of Open Accounts Receivable," in the *Bankers' Magazine*, Vol. 101 (1920), p. 712.

to write to us, they were engaged in the sale of the *Encyclopedia Americana* which, as was customary in book ventures, was sold on the monthly-payment plan. The working capital, however, was soon exhausted, and this fact led to the thought of starting an organization which might deal with receivables in general. As early as 1904 Mr. Little began to ascertain what forms and contracts might be needed. His quest was facilitated by a recent decision of the Illinois Supreme Court, which held that a man could assign his wages and appoint himself as agent with irrevocable powers to collect the same for the benefit of the lender. With the aid of a lawyer, Mr. John W. Creekmur, an agency contract was drawn up which provided for the collection of the account by the assignor as the agent of the assignee. This agency contract became the characteristic feature of the so-called non-notification plan.

In the meantime, Mr. Jones got into touch with Mr. Little, and provided a large part of the capital. A business arrangement was entered into in the summer of 1904. At the outset the ordinary notification plan was followed; but as the concerns involved objected to having their customers notified to pay the new company, the non-notification plan was adopted two or three months later. Messrs. Jones and Little confined their activities to the buying of open current book accounts from merchants, jobbers and manufacturers. After testing out the business for some nine months, the venture proved to be both practicable and profitable, and accordingly in the spring of 1905 the Mercantile Credit Company of Chicago was incorporated with an ample capital. This continued as a closed corporation until 1908. In that year Mr. Little sold his interest in the company and, in connection with Mr. Melville Rothschild, organized the National Trust and

Credit Company, which developed the business on a rather large scale.

Before long, the financing of instalment payments was added to the business: the exact date of this can, however, not be ascertained, as the system developed almost imperceptibly. The business of lending on instalment paper seems to have developed first in connection with the canning industry in Indiana and Wisconsin. The bulk output of tomatoes, corn, peas, and other products was at that time contracted for in advance by the wholesale merchants of the country. It was customary at that time for the wholesale merchant to take 25 per cent of his order as soon as it could be delivered from the canneries and make payment therefor within ten days. The next 25 per cent he was to take in ninety days, the next 25 per cent in six months, and the final 25 per cent of the year's pack was to be taken and paid for in nine months. The National Trust and Credit Company bought these contracts, took over the merchandise with which to fill them, paid cash, and accepted payments as provided in the contracts. In 1914 the National Trust and Credit Company was reorganized under the name of the National Bond and Investment Company, and still exists under that name today. It was not until February, 1917, that the company began to deal in automobile securities.

In the meantime, Mr. Jones continued in the original business, which was later reorganized as the Continental Credit Trust of Chicago, of which he continues to be president. His company, however, did not begin to deal in instalment paper until 1925, and pays very little attention to it even today.

Three years later, in 1908, the idea was developed, so far as we can learn, in an entirely different manner in St. Louis, by Mr. Henry Ittleson, who induced other prominent business men connected with the May De-

partment Stores to join him. There was accordingly formed the Commercial Credit Investment Trust which rapidly developed a business of lending on the security of open accounts of numerous jobbers and manufacturers and purchasing their drafts, acceptances and notes receivable. After various changes and reorganizations, this company was transformed into the Commercial Investment Trust Corporation, which is still under the presidency of Mr. Ittleson and which, now in New York, has become one of the greatest of all existing finance corporations.

At about the same time the idea was taken up in the East by Mr. Anderson of the Manufacturers Commercial Company of New York; but so far as can be ascertained, very little business was done by them along these lines. The credit of applying the principle in the eastern states belongs to Mr. A. E. Duncan, at present the head of the Commercial Credit Company of Baltimore, which is now also one of the largest of existing finance companies. Mr. Duncan started the business in 1910; and the system soon spread to other concerns.

These credit or finance companies came to be fairly common in various branches of business. It was only about a decade after their first appearance that the methods were applied to instalment selling in the automobile business. In the meantime, it is perhaps worthy of note that the practice of financing real-estate instalments was first applied in 1912 by Mr. William E. Harmon, who informs us that he was the first individual to write an instalment contract for land.[1]

More important, in some respects, than the advent of the finance company dealing in receivables was the introduction of the so-called Morris Plan or, as it is often called, the Morris Plan of Industrial Banking.

[1] William E. Harmon, "Investments on the Instalment Plan." *Proceedings of the Academy of Political Science of New York*, Vol. II (1912), p. 94.

Although the history of the Morris Plan has often been told in popular articles,[1] no detailed account of its origin, or of the philosophy underlying its conception, has yet been made public. What we have to say on this point is largely the result of written and oral information kindly imparted to us by the creator of the system.

It was as far back as 1905 that a young lawyer in Norfolk, Virginia, by the name of Arthur J. Morris, had his attention called to the needs of the small borrower and to the depredations of the loan shark. It was the work of years and of an activity animated by rare ability and still rarer character that led this pathfinder laboriously to develop the conditions, both financial and economic, which were to safeguard the new form of credit. It was only after several years' study and experimentation that Mr. Morris became acquainted with somewhat analogous attempts that had been carried on for over a quarter of a century in Italy with the *Banche Populare* and for over half a century in Germany with the *Schultze-Delitsch* and the *Raiffeisen* banks.

There were three fundamental principles that guided Mr. Morris in the early elaboration of the plan. These were, respectively, the grant of credit primarily for consumption purposes; loans on personal security without collateral; and the repayment of the loan in instalments. A word as to each of these.

The credit facilities of the ordinary banks were extended primarily for business or productive purposes. Individuals who needed loans of a personal character to tide them over emergencies in their daily expenditures had only one of two alternatives—the pawnshop or the loan shark. The idea of Mr. Morris was that emer-

[1] Cf. Merle Crowell, "The Man Who Has Loaned Money to Millions of People," *American Magazine*, March, 1921; and Frank P. Bennett, "What We Think of the Morris Plan," *United States Investor*, June 5, 1926. Both of these have been separately reprinted.

gencies connected with the daily outlay of the individual were of quite as much importance as the phenomena of business life.

In the second place, assistance was often needed by those who had nothing to offer as security except their own personality, their integrity, and their future earning capacity. To apply to the bank was useless for two reasons: first, because it could not afford to incur such risks; and second, because the loan would naturally involve a considerable time before it could be repaid, thus destroying the essential liquidity of the paper necessary to ordinary bank operations. Mr. Morris believed that most people are honest if they be given a fair chance. If, on investigation, a man appeared to be honest, if his need was actual, if the outlay was justifiable in view of his expected earnings, and if he could secure two friends to add their names to the note as endorsers, that was all that was required.

The third point was almost equally important, namely, the introduction of the instalment method of repayment. The instalment plan was the result of careful and detailed calculation. If the would-be borrower was confronted by a real emergency, it was only natural to conclude that some time would elapse before the emergency would completely disappear. Speedy repayment in full was therefore out of the question. On the other hand, too long a postponement of final payment would also be hazardous because, during this protracted interval, many things might happen to the earning capacity of the borrower or to the situation of the endorsers; and the safety of the loan might thus be endangered. Finally, the obligation to repay in instalments, beginning forthwith, might be expected to introduce more orderly habits into the budgetary system of the individual; to spur him to renewed activity with the view of retaining the confidence of his endorsers;

perhaps even to redouble his energy; and above all to induce in him the habit of saving which, starting out necessarily as compulsory saving, might later on, after the repayment of the loan, continue as voluntary saving.

It was as a result of all these considerations and of detailed calculations that the period of fifty weekly instalments was adopted, with the demand of 6 per cent interest plus a charge of 2 per cent. Less than fifty weekly repayments would have imposed too great a hardship upon the borrower; more than fifty weekly repayments would have increased the risk and therefore the charges. The underlying theory of the Morris Plan was to combine the greatest possible service with the least possible cost; and while it was primarily intended to help the individual in the rare crises of his existence, it has at the same time accomplished wider economic results, which have permitted the extension of the system in many ways that were scarcely thought of at the beginning.

Commencing with one little institution in Norfolk, Va., in 1907, the Morris Banks, as they now came to be called, gradually increased until, in 1910, they had become so numerous as to warrant the organization of a far more elaborate institution. Mr. Morris now came to New York and, with the aid of some prominent bankers, started, in 1910, the Industrial Finance Corporation, which was to control the various Morris Plan banks and companies. The success was instantaneous. The volume of business, in 1926, was $166,000,000, and the total earnings of the more than one hundred and twenty Morris Banks, throughout the country, was over $3,000,000. The losses have been less than 1/10 of 1 per cent. The Morris Banks have accomplished a revolution in banking methods and have brought credit within the reach of every individual, however humble his economic status.

What is of especial interest to us is that, from the very beginning of the Industrial Finance Corporation, credit was not infrequently granted to the borrowers in the Morris Banks in order to facilitate the purchase of automobiles. The year 1910, therefore, marks the inception of automobile instalment sales. It is interesting, however, to note why this method was abandoned at the expiration of the first year. The officials who investigated the personal condition of the would-be borrower observed that this new-fangled device was really, at the time, a luxury. In view of the current opinion of the day, they could not but deprecate loans for mere luxuries. Although Mr. Morris did not quite agree with this, he gave way to the criticisms of his associates and thus the promising experiment of instalment selling in automobiles was discontinued. It is simply an indication of how difficult it is for human beings to overcome inherited prejudices. The early banks would have nothing to do with the Morris Plan because there was no collateral. The Industrial Finance Corporation abandoned instalment credit for automobiles because they were luxuries. These two inveterate prejudices, the objection to consumption-credit and the objection to credit for luxuries, still continue, as we shall see, to play a rôle in the modern discussion.

Although the Morris Plan discontinued instalment selling in automobiles, it is worthy of note that in 1917 Mr. Morris resumed the practice in connection with the Studebaker Motor Cars. Two or three years later, however, this business was transferred to a special finance company, known as the Industrial Acceptance Corporation, of which Mr. Morris also served as president, and which has now grown to great proportions. The volume of paper purchased in 1926 by the Industrial Acceptance Corporation exceeded $85,000,000, and the

number of customers served represent about 85 per cent of the Studebaker domestic dealer organization.

While the Morris Plan, therefore, was really responsible for the first application of instalment selling to automobiles, the application at the beginning was of short-lived duration. The utilization of the instalment plan as a permanent method of sale came a few years later.

The credit of being the first to make a regular business of purchasing automobile paper is generally ascribed to Mr. Edward S. Maddock, now the president of the New Amsterdam Credit Corporation in New York, in 1915. As a matter of fact, however, we have been able to ascertain that this is an error. The credit is really due to Mr. L. F. Weaver, of San Francisco, in the year 1913. As appears from a letter which Mr. Weaver has been good enough to write to us, he had been engaged in the selling of wagons and other vehicles in California on conditional sale contract terms for about fifteen years. His experience led him to the conclusion that the problem of the country merchant had always been how to finance the wagon and buggy sales. It was difficult to get enough funds to carry the time paper. When the automobile began to come into universal use, Mr. Weaver concluded that if it was difficult for the dealer to finance wagon sales, it would be almost impossible for him to finance automobile sales unless he had help. Mr. Weaver accordingly decided to make the experiment and, in December, 1913, engaged in the Automobile Finance business under the firm name of L. F. Weaver. Although he was discouraged by the banks and financiers generally who told him that he would certainly lose what he invested, he persisted and prospered, although, as he writes, he "was over-cautious in the beginning and always looking out for trouble." In 1916 the business was incorporated under the name of

L. F. Weaver Company, and in 1927 the Company sold out to the Commercial Investment Trust Corporation of New York.

Two years later, but evidently in a quite independent manner, Mr. Edward S. Maddock applied the method in Ohio. As he states in a memorandum which he has kindly put at our disposal, he suggested in May, 1915, to Mr. John L. Willys and Mr. Walter Stewart, president and treasurer respectively, of the Willys-Overland Company that that company should take the initiative and sponsor a standardized scheme for the sale of their cars on deferred payments at retail. To those gentlemen, Mr. Maddock asserts, belongs the credit of seeing the possibilities offered by such a business plan. They joined with him in the formation of the Guaranty Securities Company in Toledo, Ohio, the purpose of which was to place the trade advantages of the instalment method at the disposal of the Willys-Overland dealers exclusively. The office was opened on July 1, 1915.

In April, 1916, however, the company was succeeded by a New York corporation, the Guaranty Securities Corporation, which announced its readiness to handle business on all makes of cars without discrimination. In the interval several other manufacturers had begun to make inquiry about the facilities for their dealers, and at the automobile show in January, 1916, an effort was made to unite all the principal manufacturers as stockholders and directors in one general finance company which should handle the business of all. The time for such co-operation, however, had not yet come. But so much interest was now taken in the matter that several existing finance companies in other fields began to open departments for automobile finance; among these were the Commercial Credit Company of Baltimore, the Commercial Investment Trust of New York, and the National

Bond and Investment Company of Chicago, as mentioned above.

The difficulties at the outset were formidable. Perhaps the most important was that of retaining a legal right to the automobile until the final payment was made, irrespective of who might happen to be in possession of the car. The difficulty here of establishing an unimpeachable lien upon the car, wherever it might be necessary to recapture it, arose from the fact that the provisions of law governing the situation not only differed from state to state, but had nowhere been developed with a view to special application to the automobile. It was necessary, therefore, to devise contracts which included elaborate lien instruments varying according to the provisions in each state. In some states the system followed that of conditional sales. In other states preference was given to the method of chattel mortgage and the like. In the early years no less than thirty-one different varieties of forms had to be used. Only gradually was a greater uniformity introduced.

While the primary attention was at the outset devoted to the problem of the repossession value of the car, the dealers were so glad to secure any of the facilities afforded by the new organizations that the few companies which had entered the field were able to make fairly satisfactory arrangements. At first the retail notes which were delivered by the dealers were indorsed not only by the dealers themselves but also by the distributors from whom at that time it was customary for the retail dealers to secure the cars. There were at the outset, therefore, virtually no repossessions at all so far as the finance companies were concerned. In the next place the companies were able to make agreements with ordinary insurance companies, through which protection was accorded to virtually all the parties involved, the pur-

chaser, the dealer, the distributor, and the finance company. We are told that the earliest insurance contract of this kind was obtained by the Guaranty Securities Company, covering fire and theft insurance on the Willys-Overland and the Willys-Knight cars at a flat rate of sixty-six cents per hundred dollars. But this did not last long. As the loss, especially from theft and collision, aggregated large figures, some of the insurance companies abandoned the field at a fairly early period.

The original facilities afforded to retail dealers were during the winter of 1915–16, supplemented by trade-acceptance accommodations for Willys-Overland cars shipped to be stored against spring sales. This was the earliest appearance of the wholesale contract. A trust receipt was worked out, again at the instigation of Mr. Maddock,[1] under which dealers were allowed to receive the cars in their own warehouses or showrooms, holding them as the property of the finance companies as security for the acceptances. These acceptances usually ran for three or four months, and were originally not subject to renewal.

By the spring of 1917 there were about half a dozen finance companies which by this time were either devoting themselves exclusively to automobiles or which had added automobile financing to their ordinary business. A meeting was now held among these companies in order to ascertain whether it might be possible to lay down certain fundamental conditions to which all of the companies would subscribe, and which would endeavor to prevent any demoralization of the credits by making the terms and conditions too easy. But here

[1] Mr. Haberman, vice-president of the Commercial Investment Trust, has, however, stated to the writer that he was the first to devise in 1915 a trust receipt applicable to the automobile business. Trust receipts up to that time had been unusual in internal commerce, although familiar in foreign transactions. The probability is that Mr. Haberman and Mr. Maddock each devised his own form; but it seems certain that the form originated by Mr. Haberman was the one generally accepted later on.

again, as in the somewhat analogous effort of the preceding year, the endeavor turned out to be premature. Attempts, however, were not lacking to maintain the business on a higher plane. From 1916 to 1918 elaborate statistical studies were made by a few of the companies, covering in one instance 10,000 purchases, and endeavoring to ascertain the details as to the customers' resources, age, sex, geographical distribution, and general condition of solvency and reputability. Another study was also made in an endeavor to ascertain the degree of the "utility" use to which the cars were put.

With the end of the War and the release for ordinary purposes of the efforts and funds which had hitherto been mobilized for the conflict, the outlook for increased sales for automobiles became more promising. It was now that the possibilities of the situation began to be realized.

As appears from a memorandum kindly submitted to us by Mr. Emlen S. Hare, the insurance company of Hare & Chase was started by his father, Mr. R. Emott Hare, and a partner, Randall Chase, in 1867. Early in 1918, Mr. Emlen Hare's brother, who was active in the firm, conceived the idea of increasing the insurance business by obtaining insurance premiums covering motor trucks sold on time. Their original business was almost entirely with the Packard Motor Car Company, of which Mr. Emlen Hare was at that time an executive. The company at first did its business on an endorsement or repurchase agreement with the dealers. During the next four years the business showed great possibilities, in fact, far more opportunity than the insurance business. It was about that time, in 1922, that Mr. Emlen Hare left the automobile business and joined his brother in building up the company of Hare & Chase, which soon became the largest company dealing in automobile instalment paper exclusively on the non-recourse system.

Early in 1919, only a few months after the entrance of Hare & Chase into the field, Mr. John J. Raskob, one of the executives of the General Motors Corporation in Wilmington, Delaware, quite independently reached the conclusion that great possibilities of increasing sales would be disclosed by the development of the instalment method, and especially by the creation of a finance company which should be in close touch with the parent manufacturing company, and which should limit itself to financing the paper of those who dealt in any of the cars that were being built by the General Motors Corporation. Accordingly there was formed, early in 1919, the General Motors Acceptance Corporation, under the presidency of Mr. J. Amory Haskell, succeeded in 1921 by Mr. C. C. Cooper, who had up to that time been connected with the legal work of E. I. duPont de Nemours & Co. The G. M. A. C., as it is popularly called, started on principles diametrically opposed to those of Hare & Chase and soon achieved a decided success, becoming today the largest of all the existing automobile finance companies.

The prosperity which almost from the outset attended the G. M. A. C., was shared by others, and there ensued a great increase in the movement. In 1919 the Merchants and Manufacturers Security Company was started in Chicago. In 1920 the Pacific Finance Company opened its doors in Los Angeles; and soon thereafter the Motor Bankers Corporation started in Detroit, and the Associated Investment Company in South Bend. It was now, however, that the movement rapidly spread to the smaller organizations, so that the period from 1921 to 1925 may be called the boom period in automobile finance. By 1922 there were about one thousand finance or credit companies dealing with automobile paper and covering about 17 per cent of all the automobiles sold. By the year 1925 the number of com-

panies had grown to sixteen or seventeen hundred, and the automobiles sold on instalments were supposed to amount to from 70 per cent to 75 per cent of all automobile sales—although, as we shall see later, these figures were somewhat exaggerated. The great mass—perhaps 90 per cent of all the automobile paper—was still handled by a very few of the older and larger companies, a fact that is reflected in the immense increase in their capital. This can be shown by the following figures:

On December 31, 1925, the G. M. A. C. had a capital, surplus and undivided profits of over 20 million dollars, assets of over 140 millions, and a volume of financing of over 281 millions. Tentative figures indicate that by December 31, 1926, these figures had grown to a capital, surplus and undivided profits of over 36 millions; assets of over 274 millions; and a volume of financing of over 631 millions.

The Commercial Investment Trust Corporation, also of New York, but with branches ranging from Boston to Kansas City, and from Minneapolis to Cincinnati and popularly called the C. I. T., had in June, 1926, a capital of over 27 millions, with assets of over 110 millions. The Commercial Credit Company of Baltimore with its affiliated organizations in New York, Chicago, and New Orleans, had in 1925 a capital of over 12 millions, and gross business of over 255 millions. Hare & Chase, of Philadelphia, with seventy-eight branches throughout the country, did a business of over 50 millions. The Merchants and Manufacturers Securities Company, of Chicago, had early in 1922 a capital of over 8 millions, while the Industrial Acceptance Corporation of New York City had in 1926 a capital of almost 7 millions, with assets of almost 36 millions. Scarcely smaller than these are the National Bond and Investment Company, of Chicago, with almost 22 millions of paper outstand-

ing, and the Pacific Finance Company, of Los Angeles, with a capital of over 5 millions.

But while the great volume of the transactions was still in the hands of a few large companies, hundreds of smaller companies had entered the field in the scramble to secure some of the profits. It was accordingly inevitable that the keen competition should assume some of the more or less familiar forms of cut-throat rivalry, and that all manner of methods were introduced which justified the common term—easy-payment system. The old method of having the dealer indorse all the customer's notes was gradually abandoned as the finance companies made more of a bid for the utilization of their facilities by the dealers. Thus the system of non-recourse was gradually introduced; that is, the system whereby, in the event of repossession of the car, the finance company would have no recourse against the dealer, but would be obligated to take all the risks itself. With the progress of the competition, the terms to the purchaser of the car were gradually made more liberal. The amount of down payment was reduced and the period during which the instalment payments might be made was gradually prolonged, so that in a few cases it reached eighteen months, two years, and even longer. The scrutiny as to the reliability of the purchaser was relaxed, and all effort was centered upon making the greatest volume of initial sales.

By this time the apprehensions of the bankers, upon whom as a last resort the finance companies had ultimately to rely, were aroused, and determined efforts were now made to introduce more order and more conservatism into the prevalent methods. The Association of Finance Companies was formed, and in the 1924 meeting a series of resolutions were adopted, recommending the use of more conservative business methods. This had its effect for a time; but the inevitable pressure of

competition led subsequently, at least here and there, to a recrudescence of the older customs. More recently there has again been a change for the better; and it may be said that at present virtually all the larger finance companies are doing their utmost to surround the business with adequate safeguards.

5. Spread of Instalment Selling to Other Commodities

The overwhelming success of automobile instalment sales could not but attract the attention of the manufacturers and the dealers in other lines. In some of these industries, as we have seen, the methods were old and well tried. But a new impetus was now given to instalment selling in furniture, sewing machines, pianos, and books. The great development, however, occurred in connection either with entirely new products which now for the first time came upon the market, or with the older lines in which the method had not yet been employed. These products included phonographs and radio sets, as well as vacuum cleaners, washing machines, and mechanical refrigerators. A great stir has also recently been made by the introduction of the system into the ready-made clothing business by the so-called ten-payment plan. The movement spread from one industry to another and the paper handled by the finance companies, large and small, now began to cover well-nigh the entire field of industry. Some of the large old companies, which had limited themselves originally to automobiles, now took on new lines. The General Motors Acceptance Corporation, for instance, while still devoting most of its energies to automobiles, dealt almost from its inception in the paper of a few other industries which had become subsidiaries of the general organization. Such was the Delco-Light Company, dealing in

as follows: Instalment selling is as old as history itself. Payment by instalment was found in public finance first in the case of payments made by individuals to the government. It was applied later, especially in the field of public credit, to payments made by the government to individuals primarily in the form of annuities and serial bonds.

In the domain of private business we find it utilized from the very outset in the case of purchases of land and of houses. In the United States this was soon supplemented by the purchase of insurance policies, and, more recently, by the buying of securities.

So far as ordinary commodities are concerned, the instalment method has been applied for over a century to the furniture business, for over three-quarters of a century to sewing machines, and for over half a century to pianos and books. In a small way the system was applied about a quarter of a century ago to the more modest purchases of ordinary personal belongings.

The real change may be ascribed to the introduction of the method in the case of automobiles, beginning a little over a decade ago—a method that was rendered possible by the creation of the finance companies, themselves an outgrowth of the credit companies which dealt with ordinary receivables and which had been inaugurated a decade or more earlier.

The colossal growth of the automobile business and the multiplication of the finance companies during the last five years finally led to the application of the instalment system to many other lines of industry. As a consequence durable goods and commodities that are not sold on the instalment system form today the exception rather than the rule. In this sense, accordingly, the instalment plan may be said to mark a business revolution resting upon a profound change in methods of marketing and merchandising.

CHAPTER III

THE METHODS OF INSTALMENT CREDIT

INASMUCH as the automobile business affords the chief example of the methods practiced in instalment selling, and inasmuch as, owing to the magnitude of individual transactions and the total volume of sales, the problems involved are exceedingly complicated, we shall devote this chapter primarily to the automobile business with the remark that what is true of the automobile business is true to a lesser degree of the other forms of instalment selling.

There are five different classes affected by the system of instalment sales: the purchaser of the automobile; the dealer, including under this head the wholesale dealer or distributor, the dealer proper or retail dealer, and the subdealer; the finance company; the manufacturer; and the banker, together with the general investing public.

As a result, we find four sets of problems arising out of the economic and fiscal relations involved. These relations are: the relation of the purchaser to the dealer; the relation of the dealer to the finance company; the relation of the manufacturer to both the dealer and the finance company; and the relation of the finance company to the banker and the investing public. In any description of existing methods, this series of relations, although more or less interdependent, must be described separately.

1. Relation of the Purchaser to the Dealer

This is the starting point of the entire method. As in every commercial transaction, the existing practices are a result of the endeavor of the buyer to secure the article at the lowest price accompanied by the most convenient means of payment, and, on the other hand, the endeavor of the seller to obtain the highest price consistent with the greatest volume of sales, that is, the largest profits.

When, as a result of this mutual pressure, the system of instalment sales was inaugurated, a whole series of considerations emerged. Under the former cash method, the only question at issue was as to whether the price was satisfactory. If the price was too high, sales would fall off; if the price was too low, the gross returns of the dealer would suffer: in either case his profits would be reduced. The price was therefore fixed, so as to result in the greatest sales to the public, consistent with the highest profits to the seller. As soon as the automobile was sold and the cash turned over, the transaction was closed; barring always either the possibility of some defect in the car which would require ulterior action on the part of the dealer, or the possible worthlessness of the check tendered in payment, which would require subsequent action against the purchaser.

With the advent of instalment sales, however, the situation was entirely changed. Although a considerable down payment might be made in cash, the bulk of the payments was relegated to the future. It became necessary in the first place, therefore, to institute some inquiries as to the credit of the would-be purchaser and as to the probability of his being able to meet the instalments as they became due. This system of investigating credit risks is, of course, not essentially different from that found in any business where goods are sold on

credit. But the problem is more complicated than in the credit ordinarily granted by the small retail dealer like the butcher or the grocer, or in the credit vouchsafed to the large borrower by the bank. In the former case, the individual amounts are so insignificant and the transactions are so likely to continue as a running account in the future that, in the case of an unsatisfactory credit risk, the dealer will discontinue the account. In the case of borrowings by the large merchant, the banker is protected by the elaborate series of checks and balances that have been devised in order to safeguard the system. The automobile dealer, however, has neither the one nor the other recourse. To refuse an unsatisfactory buyer the privilege of a second purchase does not help greatly to assure the original transaction; while, on the other hand, few if any of the would-be purchasers are sufficiently important to have a regular credit standing with the special organizations. The dealer, therefore, is left to his own devices, and must do the best that he can.

Let us assume, however, that the dealer has assured himself of the solvency and reputability of the would-be purchaser, and that he fully expects the instalments to be regularly met. If the instalments are not paid in time, that is, if the purchaser becomes delinquent, he must be reminded of his delinquency, and his memory or attention must be jogged.

A method of collecting from procrastinating purchasers must therefore be introduced. In the meantime, the question arises as to the legal rights of the various parties. The purchaser would drive away with the car, and thus acquire possession of it; but he could, of course, not be given the complete ownership. Some of the ensuing problems would be the following: Is the transaction a mere lease to the person who is using the car, or is it a sale on certain conditions? And what will

happen, as to both the disposition of the car and the amount of payments that have already been made in cash, in case the conditions are not met? Finally what should be the further development if the dealer were again in some way or other to secure control of the car through the so-called repossession—that is, the reversion to the original owner? Moreover, as the dealer in disposing of a new car is often induced to take an old car in exchange, and inasmuch as many purchasers prefer for reasons of economy to purchase a second-hand car, all of the above problems repeat themselves in connection with used cars.

Let us begin, therefore, with the initial stage of the terms on which the purchaser can secure the car. At the inception of the instalment method, the down payment was from one-third to one-half of the value of the car, and the monthly instalments were to continue for about a year. With the growing competition between the dealers to increase the volume of their sales, the minimum cash payment was gradually reduced and the maximum period of instalments was lengthened. It was not long before the minimum down payment was lowered to a third or even to a fourth of the selling price of new cars, while the series of monthly payments was increased to eighteen months, and even in some cases to longer periods. It is clear, however, that with every prolongation of the series of instalments, there is an increase in both the complexity and the uncertainty of the transaction; and that, in the endeavor to augment sales to the utmost, the risks of ultimate loss become greater.

Where a part or the whole of the responsibility for these losses has been assumed by the finance company—a point to be discussed hereafter—the obligation of the purchaser is transferred from the dealer to the company, but without fundamentally altering the nature of the transaction. As a result, however, of the increasing

losses which inevitably attend the granting of too easy terms of payment, an effort was made a few years ago to stem the tide and to introduce somewhat more conservative methods. In 1924, the Annual Convention of the Finance Companies recommended that, on new cars, the terms should never be less than 33⅓ per cent down, with twelve additional monthly instalments; and that, in the case of used cars, the down payment should be 40 per cent with a similar number of instalment payments. While these resolutions did not bring about a complete reformation of former abuses, the newer method is now commonly utilized, except on the Pacific coast, by the more conservative companies; and it is gradually spreading elsewhere.

While the ordinary practice is to sell new cars for a down payment of one-third, with the remainder payable in twelve monthly instalments, an effort has been made to meet the convenience of those purchasers whose income is not received continuously or periodically, from week to week or from month to month. This is especially true of farmers and is also applicable to other classes such as stock raisers, fruit growers, and the like. The consequence has been the development of what is known as the one-payment, the two-payment or the three-payment plan. In the case of the one-payment plan, which, speaking strictly, does not involve the principle of instalment sales, one-half of the cash price is demanded as down payment, and the remainder is payable in a lump sum at the expiration of seven months or less. In the two-payment plan, 40 per cent of the price is required as a down payment, while the remainder is payable in two instalments, one half in four months, and the other half in eight months. In the three-payment plan, while the down payment is unchanged, the remainder is divided into three parts, payable respectively, in three, six, and nine months. The same

principle is also applied to used cars, except that the down payment is greater.

It might also be observed that the former custom of advertising terms is gradually losing strength. Some of the more conservative finance companies, indeed, are seeking to reduce to its smallest dimensions the whole problem of terms, emphasizing the desirability on the dealer's part of a greater elasticity in terms, suited to the exigencies of each particular case. If the maximum terms are advertised or unduly emphasized, many a purchaser who could afford to pay cash, or who might be content with less liberal terms, will be induced to demand the maximum terms. Whereas, if the terms are made separately for each individual purchaser, the net result to the dealer is likely to be a greater down payment and a smaller number of instalments, although attended with an equally large volume of sales.

The question of terms once disposed of, the next problem for the dealer to face was how to act in the case of delinquency. With the appearance of delinquency it becomes necessary to set in operation some method of collection. The problem here is not very different from that which confronts any merchant who sells on credit. Much depends upon the tact and ability shown in making collections. The larger dealers will utilize different methods as applicable to different individuals, and under different circumstances. Widely varying forms will naturally be used according to the degree of delinquency and to the class of the delinquent. What will succeed with one individual will fail with another. Entire books and manuals have been written on this single point of collection alone.[1]

[1] One of the most breezy works is that of Bryant W. Griffin, *Instalment Sales and Collections*, New York, 1922. This describes in detail the devices commonly employed by the collecting agency, and the subterfuges often advanced by the delinquent debtor. A typical example of such a reply actually received from a delinquent debtor is appended:

If the efforts at collection prove unavailing and if, as a last resort, the dealer is compelled to set in motion the machinery for repossessing the car, two questions present themselves. In the first place, what happens to the purchaser if he is compelled to abandon the car? Under the general system in vogue in this country, the purchaser forfeits the entire amount of payments that he has already made. The situation is necessarily somewhat different from what it is in the furniture business where, as we have seen, in some of the better-class houses the purchaser is frequently allowed to retain a part, at least, of the furniture on which he has been unable to make good. In the case of the automobile, this is plainly impracticable. The purchaser must either keep or abandon it. If it should be claimed that it is unfair for him to lose the amounts which he has already advanced, two important counter-considerations must be borne in mind. On the one hand, the purchaser has had the use of the automobile in the interval, and the payments which he has made might be considered, to a great extent, as the equivalent of the benefits that he has

"For the following reasons I am unable to send you the check asked for:

"I have been held up, held down, sand-bagged, walked on, sat on, flattened out and squeezed.

"First, by the United States Government for Federal war tax, the excess profits tax, the Liberty Bond loans, thrift stamps, capital stock, merchant's license and auto tax; and by every society and organization that the inventive mind of man can invent to extract what I may or may not have in my possession.

"From the Society of St. John the Baptist, the G. A. R., the Women's Relief, the Navy League, the Red Cross, the Black Cross, the Purple Cross, the Double Cross, the Children's Home, the Dorcas Society, the Y. M. C. A., the Y. W. C. A., the Salvation Army, the Boy Scouts, the Jewish Relief, the Belgian Relief, and every hospital in town.

"The Government has so governed my business that I don't know who owns it. I am inspected, suspected, examined and re-examined, informed, required and commanded, so that I don't know who I am, where I am or why I am here.

"All I know is that I am supposed to be an inexhaustible supply of money for every known need, desire or hope of the human race; and because I will not sell all I have and go out and beg, borrow or steal money to give away, I am cussed, discussed, boycotted, talked to, talked about, lied to, lied about; held up, hung up, robbed and nearly ruined; and the only reason I am clinging to life is to see what in h—— is coming next."

derived. Had he rented the car instead of buying it, the payments might well have aggregated a similar sum. In the second place, it must be remembered that as soon as a new car begins to be used, it loses about one-third to 40 per cent of its market value, even supposing that it is in perfect condition; while, if the condition is less satisfactory, owing to greater use or to accident or to any other cause, the depreciation is much more rapid. The dealer has paid the manufacturer for a new car; if, when he repossesses the car, he receives what is worth only from one-half to one-fourth or even less of the original value, it may happen that, even counting in all the payments received, he is by no means the gainer. The system of forfeiting the payments by the purchaser therefore seems to be an essentially sound one. It should be pointed out, however, that this is not the universal practice. In some states the legislature has intervened to compel the finance company to return any excess of the selling price over and above the unpaid instalments. In still other cases, the same practice is followed by the dealer voluntarily, and as a matter of policy. But in no case, so far as we know, are the original instalments repaid.

The next problem involves the methods employed in repossessing the car. This depends upon the legal system in the particular state involved.

Attention has been called to the fact that in the early days there were no less than thirty-one different methods practised. At present the system is much more simple and uniform. The ordinary method of disposing of the car is that of the conditional sale. The purchaser is asked by the dealer to sign a written order or contract which provides that the dealer shall retain title until the entire price has been paid. In the early days this gave rise to considerable difficulty because, so far as third parties were concerned, the purchaser who has

possession of the property which really does not belong to him, appears to own it. When the other creditors or persons who had dealings with the purchaser attempted to enforce their claims upon this property, they soon discovered that in reality it did not belong to him. On account of this situation, it has become a well-nigh universal custom to require that whoever makes a conditional sale on property that has been delivered into the possession of another must place this contract upon the public records. The laws commonly provide that conditional-sales contracts must be either filed or recorded, and that if the seller neglects to record the contract, he cannot claim the property from the purchaser as against other parties who have valid claims against the purchaser.[1]

The methods of filing or recording conditional sales differ from state to state. In a few commonwealths, however, like Illinois, Pennsylvania, Michigan and Louisiana, a conditional sale has not been recognized as a valid legal instrument as against third parties. Under the uniform Conditional Sales Act, which has been adopted in a number of states, and where an election is given to the seller, either to sue the purchaser for the delinquent payments or to take back the commodity, the seller in the latter case must give notice not less than twenty days, nor more than forty days, before the property is taken. If the purchaser does not pay upon the receipt of such notice, he forfeits his right to retain possession of the property. When the seller regains possession of the property, he may hold it for a period of ten days. If one-half of the total price has been paid and if the buyer does not redeem within the ten-day period, the property must be sold at public auction within thirty days from the time that the seller takes

[1] Cf. in general W. A. Estrich, *The Law of Instalment Sales of Goods, including Conditional Sales*, New York, 1926.

possession. If less than 50 per cent of the price has been paid, the seller is not required to dispose of the article at public auction, unless requested to do so in writing by the buyer.

Sometimes the title is conveyed at once to the purchaser. In that case the dealer protects himself against loss by default in one of two ways. Either the title is made subject to a lien for the unpaid portion of the purchase price; or the purchaser, on receiving title, executes a reconveyance in the form of a chattel mortgage to the seller. As a result of this, in case of default in payment, the mortgage can be foreclosed under the general rules relating to foreclosure by public sale or, as in some states, by the method known as judicial foreclosure. Finally, a fourth method of protecting the seller is by conveyance of the title to a trustee pending performance of the contract and subject to its provisions. Whatever be the variations in the legal formalities, the ultimate result is that the dealer secures and owns the repossessed car. Occasionally some complications arise with reference to the real title which must needs be cleared up. The problems which arise when the finance company steps into the shoes of the dealer will be treated in the following section.

Up to this point we have discussed four kinds of outlays that have been incurred by the dealer: the outlays for credit investigation, the outlays for collection, the outlays for repossession, and the outlays for title clearance. There remain, however, a considerable number of other difficulties. Prominent among these is the so-called garage lien. When the dealer seeks to secure repossession of the car, he may find that the purchaser owes the garage a considerable sum, which must be met before the car can be removed. A not uncommon method on the part of fraudulent purchasers desiring to deceive the dealer consists in the practice, sometimes

connived at by the garage, of doubling or tripling the alleged sums due the garage. If the purchaser who owes the garage $100 is able to induce the garage to claim a debt of $200 or more, and if the dealer cannot show fraud in the transaction, the difference is kept by the purchaser, or perhaps divided with the garage.

When the garage lien has been effectively disposed of in one way or another, the dealer's troubles are by no means at an end. In the first place, he must arrange to store the repossessed car somewhere, and his own premises are often inadequate for that purpose. In the second place, he must repair the repossessed car in order to get it ready for sale. These repairs may vary from very small to very large amounts. Moreover, he always incurs additional important risks: the car may be stolen; it may be destroyed by fire; it may be damaged by collision; there may occur what is technically known as conversion, i.e., theft by the possessor; it may have been used in bootlegging operations with a resulting confiscation. After all these risks have been disposed of, the dealer is confronted by the necessity of reselling the used car, and of beginning over again the wearisome chain of methods discussed under the head of the new car. It is only when the used car has been finally paid for in cash that the dealer's anxieties are at an end. It is only then that, after a computation of his profits and losses, he can arrive at a conclusion as to the success of his transaction.

2. Relation of the Dealer to the Finance Company

With the introduction of instalment selling, the need of some assistance to the dealer became apparent. If the dealer had to pay cash to the manufacturer, and if he could secure only a partial down payment from the purchaser, it is obvious that he would need either more capital or more credit, in order to tide him over the

interval. For reasons that have been explained above, it became increasingly difficult for the dealer to secure the needed accommodations from the local bank. It was accordingly now that there stepped into the breach the credit company or the finance company whose function it was to lend financial assistance to the dealer in the ordinary conduct of his business.

The methods of the present-day finance companies differ according as they deal with the distributor or wholesale dealer or, on the other hand, with the retail dealer. Of course, the same individual may often act as both distributor and dealer: i.e., he may either dispose of his cars to the small dealers, or he may sell at retail to the individual purchaser. The finance companies ordinarily provide both for the wholesale plan and for the retail plan. In special cases a third system of financial assistance is found as applied primarily to the foreign dealer or his agents: that is, the individual who disposes of the American cars abroad.

The wholesale contracts are obviously more simple than the retail contracts, in that the problems connected with repossessions and used cars are eliminated. The ordinary wholesale financing plan is a method whereby the dealer and the distributor can acquire new cars, which are then stored either in their own showrooms or in warehouses under their control or in public licensed warehouses under the pledge of warehouse receipts. A typical plan which differs only in details from other similar plans is that of the General Motors Acceptance Corporation.

Under the wholesale contract, cars may be shipped by freight or driven from the manufacturer to the distributor or dealer, from the distributor or dealer to the subdealer, or from the manufacturer to the subdealer for the account of the distributor or of the dealer. When the cars are stored on the dealer's floor or in a

warehouse under his control, they are secured under a trust receipt, and the dealer enjoys the possession, but not the title, which remains in the hands of the finance company. The cars may be kept on display in the showrooms, but may not be demonstrated or removed without express permission, any action to the contrary constituting a legal breach of trust. The invoice price includes the original dealer's price of the car, the excise tax, and the freight if prepaid by the shipper. The finance company usually advances 90 per cent of the total invoice price less the initial finance charges, or differential which includes the insurance. Interest at 6 per cent is collected when the notes are paid. The maximum time allowed for repayment is six months, but with the possibility of renewals.

This arrangement, it will be seen, does not involve any method of ordinary payment by instalments. Due to the fact, however, that it is the usual practice for dealers to pay portions of the total note representing one or more cars at a time, the notes are generally partially liquidated before maturity. This practice of "anticipation" operates to reduce the average term of the note outstanding to about three months. It is the general commercial practice of purchasing commodities by a small down payment accompanied by the extension of credit for the remainder, to be paid in a lump sum. Inasmuch, however, as many of the distributors also sell at retail, the wholesale plan is intimately bound up with the method of retail sales which is distinctly based on the instalment system.

The retail-sales plan differs in some vital respects from the wholesale plan. In the latter only a small down payment is required, because of the general credit standing of the distributor, and because the car remains intact as a new car. The risk, therefore, is comparatively small. In the retail plan, on the other hand, the

car is sold to Tom, Dick and Harry, who may vary considerably in their credit standing. Moreover, as soon as the car is driven away by the purchaser, its value is reduced by one-third or more. The consequence is that a considerably larger down payment is necessary than in the case of the wholesale plan. The essence of the system is payment by instalments, which are due, as a general rule, either in twelve equal monthly sums or, as a concession to farmers and others, in two payments, one every four months; or in three payments, one every three months. In both of the latter cases, however, a larger down payment is required, inasmuch as there is no instalment due until after the expiration of the longer period.

In the retail-sales plan the chief problems are, in their logical order, the following: the estimation of credit risks, the collection of the instalments as they become due, the insurance against contingencies, the necessity of repossession in case of default, and the disposition of used cars.

The question of the credit risks or the financial reliability of the purchaser is the very center of the whole process. This constitutes a function which in ordinary business devolves primarily upon the dealer or merchant. If he grants credit to a customer, he does so at his own risk, and is, as a consequence, careful to investigate all the concomitant circumstances. With the advent of the finance companies which supply the dealer with most of his capital, the situation is altered to the extent that the finance company desires to assure itself also of the worth of the paper on which it makes the advances. In all cases, therefore, the grant of credit on the instalment plan by the dealer must be approved by the finance company. If the latter thinks that in any individual case the dealer has been too lax, it will not hesitate to turn down that particular note. Its action, however,

will be governed by the consideration that over-great caution is as inadvisable as excessive laxity; that too rigid enforcement of the rule of safety may result in the ill-will of the dealer and a loss of business.

In some cases, and especially under the non-recourse system to be described later, the finance companies go a step farther. They make an independent credit investigation of their own, and thus relieve the dealer of the obligation to look into that aspect of the situation. Since the investigation must necessarily be made on the spot—for investigation at a distance would be of comparatively little avail—this necessitates the assistance of local companies, or local branches of more general finance companies.

After the credit investigation has been made, and the car has been turned over to the purchaser, the next point is that of collections. Here, again, the original practice was for the dealer to make the collections. But finance companies, especially with the development of many of the larger organizations, soon undertook the task of collecting, rather than to have the notes pass through the hands of the dealer with the complication of forwarding the sums to the finance company. When delinquencies take place, the question arises as to who should do the following-up. Most of the finance companies are prepared to do this work, and have in readiness a series of form letters to be sent to the various classes of delinquents. Under the non-recourse plan, where the dealer is relieved of responsibility, the collections would naturally be followed up by the finance company. But even under the recourse plan, where the financial responsibility still attaches to the dealer, the following-up is done sometimes by the dealer and sometimes by the finance company, according to the conditions of the particular case. If the dealer thinks that the local agent of the finance company is competent to undertake the work,

he will be glad to have him do so; but, on the other hand, where the dealer feels that he can more advantageously follow up a situation for which he is ultimately responsible, this becomes the usual practice.

The actual method, therefore, depends partly upon the readiness of the dealer to create a follow-up scheme of his own, and partly upon the exigencies of the particular case. The follow-up methods, especially in the automobile business, demand the exercise of not a little tact, and often present some amusing incidents.

The next problem is that of insurance. The principal ordinary risks are those of fire and of theft. In addition to these elementary categories there have emerged with experience a number of other hazards. Outstanding among them was the risk of collision, with the damage resulting not only to the car itself, but to the person or property of the other party to the collision. A little later appeared the increasingly common practice of so-called conversion, where the purchaser himself absconds with the car, on which a number of instalments are still due. The difficulties in connection with conversion often transcend in number and importance the hazards of actual theft by a third party. Finally, since the advent of the Eighteenth Amendment and the growth of the bootlegger trade, there has arisen the problem of so-called confiscation. If the car upon which instalments are still payable is shown to have been used in the bootlegger traffic, or otherwise in violation of the laws enacted under the Eighteenth Amendment, it is subject to confiscation by the authorities, with the consequent total loss of the unpaid balance to the dealer or to the finance company.

At the beginning, the fire and theft insurance was provided by the ordinary insurance companies, and individual policies were issued in the regular way. Soon

thereafter it became the practice for insurance companies to issue blanket policies to the finance companies for the joint protection of the owner and the finance company. Not a small part of the profits of the early finance companies were in fact made through favorable contracts of this kind with the insurance companies, inasmuch as they charged the dealer or the purchaser, as the case might be, an amount which exceeded the sum due to the insurance companies. Moreover, some of the early finance companies were themselves the outgrowth of the insurance companies which now took over this new business. As a consequence of certain legal requirements, we find as early as 1919 the inception of special companies organized in connection with the finance companies to act as agents or brokers in arranging the necessary fire and theft coverage, receiving the usual commission for these services. Such was, for instance, the Insurance Brokerage Company. Difficulties, however, occasionally ensued as a consequence of the lack of control over the general underwriters. This has led some of the finance companies to inaugurate subsidiaries of their own to carry on this work. Thus in August, 1925, the General Exchange Insurance Corporation was created by the General Motors Acceptance Corporation to carry on the insurance business on its instalment sales.

Some of the other finance companies have analogous insurance subsidiaries. In the majority of cases, however, the finance companies still make general contracts with the ordinary insurance companies.

The fire and theft insurance as commonly found at present is of two kinds, the retail insurance and the wholesale or floor-plan insurance. The retail insurance, again, is of two varieties. A master policy may be issued running to the finance company with certificates

to be issued to the individual customer.[1] The other plan is to follow standard insurance practices and issue an individual policy to the customer, carrying a loss-payable clause in favor of the finance company as its interest may appear or to the customer, the dealer and the finance company, as joint assureds. The latter plans are regarded with more favor by the Insurance Departments of the various states. The wholesale or floor-plan insurance, on the other hand, may be written in four different ways. In the first place, there may be an individual policy on each car. This, however, is very involved, as specific rates must be applied and *pro-rata* cancellations must be figured. The second plan is one in which the dealer secures a blanket policy which automatically protects all the cars he owns, the premium being figured on the value of cars on hand at the end of the month. The third plan is the master policy, providing a flat rate per annum on all cars and figured on the average amount of the monthly balance outstanding. The fourth plan is a master policy involving a flat rate per car regardless of time. This last plan, although much favored by some experts, is not yet in common use.

Next in importance to the fire and theft insurance is the single-interest collision insurance, which has grown rapidly of recent years. It protects the finance company against loss resulting from collision where this has caused the abandonment or repossession of the car. The experience of the insurance companies on this point depends largely on the way in which the finance company regards the insurance. If the finance company exhausts every effort to collect the notes before it makes a claim on the insurance company, this kind of insurance can

[1] Cf. in general, W. S. Mays, "Insuring and Bonding Practices in Relation to Automobile Financing." Read at the Third National Automotive Finance Conference, at the National Association of Finance Companies, in November, 1926. Chicago, 1926.

be carried at a very low rate. In the many cases, however, where this is not done, the insurance companies find that the loss amounts to as much as ten or fifteen dollars a car.

Conversion insurance has been developed to cover the risk of theft. The problem here is complicated by the archaic legal presumption that, when a purchaser takes an article into another state without notice to the owner of the lien, he commits a conversion. This principle may have been desirable for sewing machines, furniture and pianos, but it does not seem applicable in the same sense to automobiles. Many insurance companies have had a very unfortunate experience with the conversion policies; and it is pointed out by experts that this is due largely to misapprehension on their part. The conversion policy is intended to cover a criminal or illegal act on the part of the purchaser; it is not intended to make a collection agency out of the insurance company. The rates vary from forty or fifty cents a hundred dollars, with a minimum per car of \$3–\$5, according to the number of cars insured. The rates are fixed by the Towner Rating Bureau for the East and West. For the Pacific slope and the South the rate is generally \$5 for a new car and \$7.50 for a used car.

Confiscation insurance can usually be obtained at the rate of about \$5 per car from the surety companies and from some fire insurance companies. The practice as regards confiscations at one time differed considerably in the various sections of the country. In some the Federal Government was exceedingly rigid. In others, where it was proved that the finance company had no knowledge of the illegal use of the car or truck in attempting to evade the Eighteenth Amendment, the Government often recognized the fact and returned the car. Recent decisions, however, which grant to the Government the right to confiscate under both the

revenue and the prohibition laws have rendered its position more certain and have contributed to a more uniformly rigid practice.

Another form of insurance protects the finance company against legal liability for personal injury in respect to cars repossessed and operated by its representatives. The rates vary from $2 to $3 a car. In property damage they are generally $1 per car.

A very recent development is that of statutory liability insurance. Massachusetts has just put into operation a law requiring that no person shall drive a motor vehicle without insurance to protect the public from loss through personal injury and damage to property. This insurance can be secured from companies specially authorized for this purpose within the state. It is not unlikely that this form of compulsory insurance will spread elsewhere and especially in such states as South Carolina where there exists a law which gives the injured party a first lien on the car if liability insurance does not exist at the time of accident. As has been pointed out, however, in a recent memorandum,[1] compulsory security will not of itself tend to reduce accidents, and its adoption ought always to be accompanied by concurrent legislation and enforcement in accordance with the recommendations made by the so-called Hoover conference, which will be mentioned below in Chapter XI.

A still more recent innovation is the so-called purchaser's disability insurance or purchaser's inability insurance. This provides protection for both the purchaser and the finance company or dealer to the extent of the monthly instalment in case the purchaser is disabled fifteen days or more while paying for the car, as well as in the event of accidental death. The policy

[1] '*Report of the Committee of Nine on Financial Responsibility for Automobile Accidents*,' New York, 1927.

pays the amount outstanding for the benefit of the purchaser's estate. The rates range from $5 a car upward. This type of insurance seems to be successful from the point of view of stimulating sales and increasing the satisfaction of the purchasers, inasmuch as many people refrain from buying cars, or at all events are very uneasy, because of the fear of sickness or accidents. Whether, however, this type of insurance is inherently sound is perhaps open to question.

There still remains a form of insurance known as note guarantee, which is of significance as affecting the relations, not of the finance company to the dealer, but of the finance company to the banker. This kind of insurance will be treated later.

Among the problems that enter into the retail plan, apart from the question of rates and terms to the purchaser to which allusion has been made in the last section, the most important without any doubt are those of repossession and of used cars. If the purchaser is so delinquent in his payments that repossession becomes necessary, the problem arises as to which of the two parties concerned, the dealer or the finance company, shall undertake the task. This has led to the development of three distinct methods of adjusting the difficulty, known respectively as the recourse, the non-recourse, and the repurchase system.

The recourse system is so called because the customer's notes, which are handed over to the finance company by the dealer, are indorsed by the dealer so that the finance company, in case of the purchaser's failure to pay, will have recourse against the dealer. The dealer, therefore, in order to discharge his liability to the finance company, is compelled to take steps looking to the repossession of the car (unless indeed, as is sometimes done, the finance company relieves him of this

responsibility and repossesses the car for him) which he may then sell as a used car to meet his liability to the finance company. The dealer thus assumes the responsibility involved. If he sells the used car for more than the balance of unpaid instalments, he makes a profit; if he sells it for less than this balance, he undergoes a loss. The important factor, therefore, is the difference between the actual value and the amount of unpaid instalments.

Opposed to the recourse system is the non-recourse system, or in other words, the system whereby the finance company has no recourse against the dealer. The finance company here assumes all of the responsibility. It not only makes the original advance to the dealer and receives the instalments as they become due but, in case of default, institutes its own methods for securing repossession of the car; and subsequently, after salvaging and reconditioning the car, the finance company itself disposes of the used car on the market. Under this system the dealer becomes to all intents and purposes the agent of the finance company for selling a new car. The decision, and frequently the investigation, as to whether the individual purchaser is a good risk is relegated to the finance company; and virtually all that remains for the dealer to do is to display the car and to arrange with the purchaser as to terms, which in most cases are the standard terms fixed by the finance company.

The third or intermediate plan is the repurchase method. Under this plan the finance company has no recourse as such against the dealer, but enters into a contract with him whereby he agrees, in the case of repossession by the finance company, to repurchase the car. In this way the finance company is saved the necessity of attempting to dispose of the used car, and limits itself, in a large measure at least, to its purely financial function.

Historically, all the early retail arrangements were on the recourse basis; and this is still the system that is practiced by most of the large companies. The repurchase method came a little later—about the year 1920—as a modification of the recourse plan. The companies that introduced the repurchase method, however, soon found that it was full of uncertainties, and that the repossessed cars could not always be repurchased by the dealer when repossessed. The consequence was that, especially in the case of the smaller and less responsible dealers, the finance company was compelled after all to assume the responsibility of selling the used cars. The obligation could no doubt in most cases have been enforced; but there now entered the problem of competition among the finance companies to secure the business of the dealers. In order, therefore, not to forfeit the dealer's good-will, some of the finance companies temporized. Refraining from over-drastic methods, they permitted the dealer to keep the car for a month or two, the dealer claiming that he was trying to sell the car and that he could not pay the finance company until it was sold. It was only as a last resort that matters were brought to a head, and that the finance company would take over the car and resell it itself.

When the finance companies discovered that not infrequently the alternative was either to create a bad feeling on the part of their own dealers, or take a loss because of their unwillingness to force the dealer into accepting a repossessed car, the next step was a perfectly explicable one, namely, to relieve the dealer of all responsibility whatever, save that of the initial sale of a new car. The non-recourse system was therefore favored by some of the smaller companies which sought a larger share of the business of the dealers and which attempted to secure this by relieving the latter of all responsibility. Some of the larger finance companies themselves—

notably Hare and Chase until their recent *débacle*, and the National Bond and Investment Company of Chicago—followed the non-recourse method; while a few other companies are more or less impartial as between the systems. The competition between the recourse and the non-recourse companies became a bitter one and the arguments marshalled on each side constituted a formidable series. An effort was at one time made by the partisans of the non-recourse method to array both the dealers and the finance companies on their side. At the Ninth Annual Convention of the Automobile Dealers' Association in Chicago, held in February, 1926, the third of the ten recommendations adopted was in favor of the elimination of all dealer indorsement of customer paper. It is noteworthy, however, that at a subsequent meeting later in the year the dealers' association of Denver took the contrary position. Whether the non-recourse plan is good for the finance companies on the whole, or even in the long run for the dealers themselves, was until recently a moot question. From the point of view, however, of all the parties concerned, it is no longer simply a question of business methods allowing the largest profits; but it embraces many points of economic and social significance other than the mere profits involved. As such, it deserves a fuller consideration, which will be accorded to it below.

The uneasy feeling engendered in the minds of some of the dealers has led, in the recourse system, not indeed to a departure from the plan, but to certain changes designed to render the plan more practicable. It was realized that in many cases the dealers—and especially the small dealers—could not be expected to leave themselves wide open to loss resulting from the risks involved in conversion, confiscation and collision. Many dealers were buying insurance coverage at high rates, thus increasing the price of the cars. Some of the finance

companies accordingly decided to endeavor to protect the dealers, and to relieve them from loss on these accounts alone, making a small charge to the purchaser, and reimbursing themselves in case of loss out of reserves specially set up for this purpose. Under the retail plan offered by the General Motors Acceptance Corporation, for instance, every car sold is automatically covered by fire and theft insurance for one year from the date of contract. The insurance is designed to protect both the purchaser and the dealer, and assurance is given, not alone of protection, but of prompt settlement of all claims and of general fair treatment. In the second place, the dealer is protected from loss in the event that the car cannot for any reason be repossessed. If the finance company undertakes to make repossession, it will do this as soon as possible after default on the instalment payments, unless otherwise instructed by the dealer.

When a repossession is made by the finance company, the car is turned back to the dealer, who is thereupon expected to reimburse the finance company for the amount outstanding. The provision, however, is often added that in case a repossessed car is turned back to the dealer more than ninety days after the default, the amount to be paid by the dealer to the finance company will not exceed the appraised value of the car at the time that it is turned back, in all those cases where the appraised value is lower than the sum outstanding. Similarly, it is provided that where a car is converted and is later recovered, but is damaged before recovery to such an extent as to reduce its value to less than the amount outstanding, the sum to be paid by the dealer to the finance company shall not exceed the appraised value of the car at the time that it is turned back. Again, in case of confiscated cars, the dealer is protected for the amount outstanding unless the car is recovered

and turned back to the dealer, in which event it will be treated in the same manner as a repossession. Finally, when a car is repossessed and turned back to the dealer as the direct result of a proven collision, and is damaged to such an extent as to reduce its value to less than the amount outstanding, the dealer may deduct from the amount due to the finance company the cost of such repairs as are necessary in order to bring the value of the car up to the amount outstanding (less $25). The protection for conversion, confiscation and collision above described is often characterized as "one-interest," that is, it is designed to protect the dealer only.

In order to render the situation still more acceptable to the dealer, some of the finance companies set aside a so-called cash credit reserve for the retail dealer. The amount so set aside by the General Motors Acceptance Corporation on new passenger cars financed is 1½ per cent of the first $500 of the unpaid balance plus ½ of 1 per cent on the remainder of the unpaid balance. On used cars ten dollars flat is set aside, regardless of the amount of unpaid balance. This cash reserve, designed to provide for every other possible loss not already accounted for, is drawn upon to reimburse the dealers for losses periodically. It may also be pointed out that in addition to all these other services rendered by finance companies under the recourse plan, some of the companies have instituted a collection service designed to relieve the dealer of the necessity of installing a service of his own.

While all these developments might seem somewhat to blur the difference between the recourse and the non-recourse systems, in reality it is not so, especially because of the fact that under the non-recourse system there is no financial responsibility resting on the dealer, and no obligation to dispose of the used cars taken in repossession; while, on the contrary, under the recourse

system this important responsibility still devolves upon the dealer. The merits of the controversy will be treated below.

There still remains one point which is naturally of the greatest importance to the finance companies and the dealers. This is the question of finance charges or the cost of instalment credit. It is here that we find the keenest competition among the finance companies and not a few abuses that have arisen. This subject will, however, be more properly treated later under another head.

3. Relations of the Manufacturer to the Dealer and to the Finance Company

The relation of the manufacturer to the distributor or dealer is but little different from that found in other forms of business. The manufacturer disposes of his wares either to independent dealers or to agents of his own; and if he selects certain dealers to represent his own cars exclusively, he will make suitable concessions in terms and prices. In all cases, however, it has been customary for the manufacturer of automobiles to demand payment in cash. The usual method is that of a sight draft payable by the dealer or distributor on receipt of the car. The advantages to the special agent of the manufacturer are found in other respects. Whether the dealer will handle one particular line of car, or a variety of makes, or all classes will depend again upon circumstances and does not give rise to any problem essentially peculiar to the automobile business. The question, however, became somewhat different with the advent of the finance company. Originally, as we have seen, the finance company undertook to finance the cars of a particular manufacturer. This was, however, soon replaced by the method of financing cars in general. A few years later, however, there was a change in the

current, and at present there are no less than three distinct types.

Most numerous are the finance companies which are entirely independent of the manufacturer, and which deal impartially in all classes of cars. The second category consists of those finance companies which are so intimately bound up with the manufacturers as virtually to form a part of the organization. A familiar example of this type is the General Motors Acceptance Corporation, which is a finance company limiting itself to transactions involving cars sold by dealers representing the General Motors Corporation. It is an independent corporation with an entirely separate organization, but it naturally carries with it the prestige of the parent company and, as we shall see later, thereby enjoys certain financial privileges which might not otherwise be accorded to it. It must be noted, however—and this is an important point—that while the General Motors Acceptance Corporation limits its activities to General Motors dealers, the latter, on the other hand, are not restricted in their transactions to dealings with the Acceptance Corporation. On the contrary, they are at entire liberty to seek their financing wherever they like, and it is claimed that no pressure is brought to bear upon them by the General Motors Corporation, with the one exception that the financing charges made by the dealers as the result of their utilizing other finance companies must not exceed the charges that are made in the case of the Acceptance Corporation. In other words, it is a case not so much of the relations between the manufacturer and the dealer as of the relations between the manufacturer and the finance company.

The third class of contrivances is represented by the so-called subsidy system. Manufacturers who could not bring themselves to the point of organizing finance companies of their own like the General Motors now

began to seek arrangements with the larger independent finance companies with a view to having them indorse the notes, without limiting themselves, but giving preference, to the paper of the dealers in their own special make of cars. Thus, for instance, an arrangement was made by the Studebaker Company with the Industrial Acceptance Corporation, while other finance companies undertook to look after a variety of makes.

In order to induce these finance companies to give preference to this particular kind of paper, the manufacturers were led to make concessions of various kinds, known under the generic name of subsidies, to the finance companies. But here, again, in most cases the dealers in the special line of cars are not compelled to avail themselves of the services of that particular finance company.

The so-called subsidy system has of recent years aroused much discontent on the part of the independent finance companies. It is contended that it is a form of unfair competition, and that the dealers, although not nominally compelled to seek assistance from the subsidized finance companies, are yet virtually under some form of duress. This is, however, vehemently denied both by the manufacturers and by the subsidized finance companies, who assert that it is not unfair, but astute, competition. At the meeting of the Association of Finance Companies in Chicago in November, 1926, an attempt was made to secure the adoption of a resolution against the practice of subsidizing through the so-called factory companies; but when this resolution was withdrawn, a more innocuous substitute was adopted, as follows:

"*Resolved:* That the dealer be permitted freedom of choice to select the method of financing and that finance company which will best serve him in his locality."

It is entirely probable, therefore, that there will continue to be a fairly close relation between the manufacturer and the finance company.

4. Relations of the Finance Company to the Banker and to the General Public

Inasmuch as the finance company is really a kind of bank doing a special credit business of its own, its methods of securing the necessary funds with which to carry on its operations differ only in minor points from those of the ordinary banks. A bank provides itself with funds partly through its own capital, partly through the deposits made with it, and partly through the earnings of its business which may involve all manner of transactions commonly permitted to the commercial bank.

The finance company in like manner also depends in the first instance upon its capital. In some cases, as we know, the sums involved aggregate huge amounts. Inasmuch, however, as the finance companies deal in credit, they usually indulge in the practice of receiving, as well as of dispensing, credit. If they were to restrict their operations to their own capital, they would be seriously limited. They endeavor, therefore, to supplement their capital in various ways. In other words, they borrow funds which will serve them as well as their own capital. There are several ways in which they can secure these additional funds.

The simplest method, of course, is that common to all business concerns, namely, the borrowing of money on their own individual credit, as typified by the customary one-name paper. The amount so borrowed, and the rates at which the funds can be secured, will differ with the standing of the respective companies. The custom has arisen on the part of the banks of making the grant of credit of this kind dependent to a large extent upon

the relative capital of the finance companies. In the case of the best and largest companies, the amount of credit is apt to run in the proportion of five dollars of credit to one dollar of capital. With the smaller companies the proportion is lower. More attention, however, is given to reputation than to mere size. But whatever be the results, it is obvious that the ordinary figures covering the financing of automobile paper by no means afford a picture of the true rôle which the finance companies play in the modern credit structure. Although it is entirely familiar to the officers of the individual bank, there is nothing in the published statistics which throws any light on the proportion of credit advanced to finance companies as contrasted with other corporations that are seeking credit facilities.

Where this first method of securing credit proved to be relatively unsatisfactory, especially where the banks were reluctant to make loans on the simple recognizance of the finance companies or where they charged too high a rate for the service, the second method came into use, namely, the securing of credit through a discount on some of the receivables of the finance company, such as notes, business acceptances, and the like. Especially in the case of those banks which act as collection agents for the finance companies, this is an obvious and simple method. The banks in this way acquire a double protection—not alone the credit of the finance companies, but also the notes and other obligations of the creditors of the finance company. Here again, in the amount of credit advanced and the rate charged, the details differ with the standing of the respective companies and with the character of the particular receivables.

In view of the reluctance of the banks to make the necessary advances to companies of doubtful standing, two methods have been developed. In the first place, some of the smaller finance companies are in the habit

of discounting their receivables with a larger company of unimpeachable standing so that the banker receives an additional guarantee. The lower rate granted by the banker in such cases may more than compensate the discount which the smaller company has to pay to its larger competitor. Where this does not seem to be practicable or lucrative, the finance company is apt to turn to a bonding company. These bonding companies have already been previously mentioned in so far as they pursue the practice of insuring the finance company itself against any possible default on the notes of its customers. But the bonding companies—and especially new bonding companies devoted exclusively to that end—have more recently undertaken the business of insuring the banks as to the safety of the discounts presented to them. Instead of an insurance of the finance company against the customer, this new form constitutes an insurance of the bank against the finance company.

There are two general classes of such guarantee. The first is the so-called ultimate-loss insurance, which amounts to the full assumption on the part of the insurance company of all risk of loss resulting from any cause. Such an insurance policy is comparatively infrequent and is found only among a few organizations as a result of arrangements of long standing. The second form of insurance is the guarantee by the surety or bonding company of the finance company's notes for rediscount. The finance company deposits with the bank the customer's notes accompanied by an undertaking of surety that if the notes be not paid at maturity by the finance company, they will be made good by the surety company. Under another plan the finance company deposits the collateral as trust with the bank or trust company which thereupon issues certified notes, sold at banks to the public at large, guaranteed uncon-

ditionally by the surety company. Under both plans the surety company usually retains as additional collateral a certificate of deposit amounting to 20 per cent or 50 per cent of the amount guaranteed. It is obvious, however, that the rediscounting of receivables under these conditions implies a higher aggregate cost which must ultimately be included in the price charged by the finance company to the dealer and therefore to the individual purchaser. Morever, not only is the surety plan expensive, but it is really needless. If the finance company is properly conducted, and if the original credits are satisfactory, a surety bond is entirely unnecessary. If a surety bond must be introduced, it is a strong evidence of something wrong with the finance company. Surety bonds have in truth no more place in the instalment field than in ordinary business. A merchant who would endeavor to increase his borrowings from a bank by insuring it against his possible failure would not be likely to inspire additional confidence in his integrity or his reliability.

The third and most common method of borrowing is a result of somewhat analogous practices that appeared first in the railway field and that were later developed in general industry. This is a system of borrowing on collateral trust notes. The essence of this transaction is the creation of a trust agreement between the borrower and the bank or the trust company, members of which are made trustees for the holding of securities entrusted to them by the borrower. In the case of the ordinary railroad collateral trust agreement, certain mortgage bonds are deposited with the trustees, and on the strength of these a new collateral trust bond is issued. If there is any default in the collateral trust bond, recourse can be had to the underlying securities which are so deposited. In the case of the finance companies, what is deposited with the trustees consists of

various kinds of receivables. In the automobile finance companies, these receivables are the notes of the purchasers on instalment. Sometimes these notes are indorsed by the dealer; sometimes, as in the case of the non-recourse company, they are not so indorsed. Occasionally the notes are guaranteed by a bonding company. More often, in the majority of the cases where the loans are granted to the better finance companies, there is no such guarantee. The collateral trust notes, issued on the basis of these deposits are generally found in multiples of $500, and run for six months or less. As in every collateral trust agreement, the margin, that is, the difference between the market value of the collateral and the amount of the collateral trust notes is agreed upon in advance. But here again, as in all similar business, the margin will differ from case to case. The margin increases according to the particular company or the especial circumstances and often amounts to 10 per cent, to 20 per cent, or even more, so that in some cases only three-quarters of the value represented by the collateral will be advanced by the bank. It is, however, not uncommon to find a complete absence of margin; that is to say, the bank may grant a loan equal to the total amount of the collateral deposited.

An important difference between these collateral trust notes and the railway or ordinary collateral trust notes or bonds is that in the former case the collateral is a shifting quantity. In proportion as the instalment paper is paid off by the purchaser of the automobile or other commodity, it disappears from the list of collaterals and must be replaced by a new paper. This has led to the introduction of two separate methods of dealing with the problem, known respectively as the budget system and the non-preferential system of collateral trust agreements. Under the budget system certain accounts or receivables, arranged according to the

period when they mature, are earmarked to provide for particular collateral trust notes. Under the non-preferential system, there are always the same trustees for all issues of notes irrespective of the class of maturity, the new notes simply taking their place in the list as the old ones mature. The advantage of the non-preferential system is that all the holders of the collateral trust notes are put in precisely the same position without the hazard of some purchasers losing money on the notes where the particular collateral for one reason or another turns out to be less satisfactory than the others.

Finally, encouraged by their success in securing credit for the collateral trust notes, not a few companies have found it practicable to issue, on the same or similar collateral, paper of longer maturity, running for a year or two or for several years. These so-called gold notes are limited to the companies of the highest credit, and they constitute perhaps the readiest method of securing large sums from the general investing public at especially favorable rates.

The latest and most interesting development in the field of automobile finance consists in the announced formation of a nation-wide reserve system. At the close of the year 1926 an announcement was made of the intended creation of the American Rediscount Corporation, with a capital of $31,500,000. The purpose of this corporation is to perform for the finance companies the same service that is afforded to the ordinary banks by the Federal Reserve System. The new organization will rediscount instalment paper for finance companies that may qualify for membership and comply with the rules. Each member finance company will receive an affiliation certificate subject to ratification by the parent company. The corporation will rediscount only one-quarter of the amount established for the member company to borrow, permitting the member to secure the remainder from its

present banking channels. Among the requirements are periodic audits of members' books by certified accountants, uniform systems of bookkeeping, a proper check of the physical property for which notes have been given by the purchaser, maintenance of a 15 per cent cash reserve against all outstanding loans, setting a limit as to the ratio of borrowings against capital and surplus, perfection of the system of trusteeship, limitation of the automobile financing to twelve months, and down payments on new automobiles commensurate with the immediate depreciation of the car. No member company will be permitted to purchase paper of used cars in greater amount than 33 1/3 per cent of the selling price of the new car, nor paper of second-hand cars unless of an existing model less than two and a half years old. The member company will be required to register all notes issued by it and sold to bankers or the public in order to prevent the issuance of notes in a greater proportion than the credit limits of the corporation. The corporation will also recommend limiting the amount of member companies' purchases of paper on used cars to a sum proportionate to the capital as well as to the quantity of paper purchased on the sales of new cars. Finally, there will be a department for the prevention of fraud where each purchaser of the member company will be registered in order to check duplication by dishonest dealers and purchasers. If the projected organization finally comes into existence and if the actual management will comport with the announcement it may be expected to accomplish important and salutary results.

From this survey of the financial methods employed by the finance companies, two facts are apparent. The one is that the cost of obtaining money is perhaps the major factor in the charge made by them, although in order to explain the regular finance charge to the dealer there must be added the ordinary expenses of

administration and overhead. The second point is, as intimated above, that owing to these various methods of financing, it becomes almost impossible to ascertain the exact proportion which instalment-sale credit bears to the total credit transactions of modern times.

Notwithstanding the difficulties of the problem, however, it is of interest to attempt a statistical estimate of the rôle that is played at present by instalment sales. To this endeavor we shall devote the following chapter.

CHAPTER IV

THE EXTENT OF INSTALMENT SELLING

The subject of this chapter is one of especial difficulty. In the endeavor to ascertain the rôle that is played by instalment selling in modern times, we must satisfy ourselves as to the following points: In the first place, what is the total volume of all retail sales? Secondly, how much of this total volume of retail sales is represented by the sales of the particular articles in question? Thirdly, what proportion of the total sales in each line represents the transactions made on the basis of cash or ordinary book credit, and what proportion represents transactions in which instalment credit plays a part? And, finally, what percentage of the sales price is constituted by the instalment paper issued in each particular case?

Unfortunately, for not a single one of these four questions do there exist exact statistics; nor is there any method hitherto devised which would satisfy the demands of rigorous scientific procedure. In most cases we have nothing more than estimates which frequently represent only wild guesses. The problem must therefore be attacked indirectly rather than directly.

1. Volume of Retail Sales

So far as concerns the total volume of retail sales, only two scientific investigations which are at all worthy of the name have thus far appeared. One is a study by Mann.[1] This has been supplemented by later computa-

[1] Lawrence B. Mann, "The Importance of Retail Trade in the United States." *American Economic Review*, Vol. 13 (1923), p. 609.

tions which have never appeared in print, but which were kindly put at our disposal by Mr. Mann. The other investigation was that of my colleague, Professor Nystrom, of the School of Business of Columbia University.[1]

A discussion of the methods and conclusions of Mann and Nystrom, which would occupy too much space here, is relegated to Appendix Two. We content ourselves here with stating the conclusions reached by the two investigators. For the year 1923 the figures of total retail sales, as presented by Nystrom, are a little over thirty-five billions of dollars; those by Mann are a little over thirty-seven billions, with the probability of greater accuracy in favor of the former. This conclusion is emphasized by the fact that analogous studies which have been made abroad, especially by Julius Hirsch, result in the statement that the volume of retail sales in any one year is just about one-half of the entire social income. On the basis of the above computations, the total volume of all the retail sales in the United States in the year 1925 was about thirty-eight billions.

Having thus arrived at a fairly credible estimate of the total volume of retail sales, the next problem is to estimate the volume of sales in each particular line of business. Here we find the estimate of Nystrom[2] covering all kinds of retail trade, and a number of attempts, like those of the Farmers' Loan and Trust Company and of Ayres,[3] to estimate the volume of trade in specific lines.

It may be stated that we ourselves have made every effort to secure trustworthy statistics as to total sales; but have ascertained in the great majority of cases that this

[1] Paul H. Nystrom, "An Estimate of the Retail Volume of Business in the United States." *Harvard Business Review*, Vol. 3 (1924–25), p. 150.

[2] *Ibid.*, p. 157.

[3] Milan V. Ayres, "Instalment Selling and Financing," a paper read at the Third National Automotive Financing Conference, Chicago, November, 1926.

is impossible. In only a few classes of industry, although presumably the most important ones, has it been found practicable to follow scientific methods and to reach fairly reliable conclusions.

We shall first present the figures of Nystrom and of the Farmers' Loan and Trust Company, and follow these with the more elaborate estimates of Ayres.

TABLE VIII

VOLUME OF SALES OF CERTAIN ITEMS OF MERCHANDISE DISTRIBUTED BY RETAILERS

Item	Billions of Dollars
Food Groceries and meats, etc. (33% of $48,000,000,000)*	15.8
Clothing Men's, women's, and children's, including both ready-to-wear and piece goods (but not the value of home dressmaking); footwear, underwear, hats, etc. Estimated by taking 10½% of 48 billions.	7.9
Automobiles Accessories, oil, gas, etc., for pleasure purposes only.	3.0
Furniture and House Furnishings Including floor coverings, draperies, curtains, etc. Estimated by taking 5% of 48 billions.	2.4
Tobacco products†	1.7
Beverages (non-alcoholic), ice-cream, etc.†	.8
Candy and Chewing Gum	.8
Jewelry, Watches, etc.†	.49
Pianos, Organs, etc.†	.46
Fur Articles†	.18
Perfumes and Cosmetics†	.15
Toilet Soaps, etc.†	.15
Miscellaneous	1.17
Total	35.00

* $48,000,000,000 is obtained by taking $2,000 to be the average income of the 24,000,000 families.

† Expenditures during fiscal year ending June 30, 1921, from U. S. Internal Revenue Bureau.

The estimates given by Nystrom which deal with all retail sales, and which are therefore not limited to the lines in which instalment selling is found, are contained in Table VIII.

The figures given by Ayres for the year 1925, which are limited to those industries in which instalment selling is practiced, are as follows:

TABLE IX

VOLUME OF SALES OF MERCHANDISE DISTRIBUTED BY RETAILERS FOR INDUSTRIES IN WHICH INSTALMENT SELLING IS PRACTICED

(*Ayres's estimate*)

Industry	Volume of Sales
Automobiles	$3,446,000,000
Household furniture	1,000,000,000
Clothing	5,500,000,000
Jewelry	400,000,000
Pianos	225,000,000
Radio sets	225,000,000
Phonographs	200,000,000
Washing machines	105,000,000
Vacuum cleaners	60,000,000
Gas stoves	35,000,000
Mechanical refrigerators	15,000,000
Tractors	95,000,000
Other farm machinery	280,000,000

The figures given by the Farmers' Loan and Trust Company of New York, covering the period of 1924, are found on the following page.[1]

It will be seen that the item for furniture is left blank. In the text, however, it is intimated that the total sales in 1924 were about $900,000,000. If we add these 900 millions to the total, the grand total of sales for the eight lines considered by the Farmers' Loan and Trust Company would be $4,837,082.505.

[1] *Instalment Buying*, The Farmers' Loan and Trust Company, New York, 1926.

TABLE X

VOLUME OF SALES OF MERCHANDISE DISTRIBUTED BY RETAILERS FOR INDUSTRIES IN WHICH INSTALMENT SELLING IS PRACTICED

(*Farmers' Loan and Trust Company's estimate*)

Industry	Volume of Sales
Automobiles	$2,910,082,505
Washing machines	88,000,000
Vacuum cleaners	69,000,000
Phonographs	70,000,000
Furniture	....
Pianos	100,000,000
Jewelry	400,000,000
Radio	300,000,000
	$3,937,082,505

There are several discrepancies in these three tables. One part of the discrepancy is due to the fact that two of the writers use 1924 and one 1925 as the basis. In addition, however, several points are to be noticed. Clothing is omitted by the Farmers' Loan and Trust Company, although included in both the other tables. Gas stoves and refrigerators are omitted by the Farmers' Loan and Trust Company, specifically included by Ayres, and perhaps comprised by Nystrom under the head of miscellaneous. Furthermore, Nystrom includes accessories under the head of automobiles; floor coverings and draperies under the head of furniture; and organs under the head of pianos. The figures are, therefore, not quite comparable.

Inasmuch as the figures of Ayres have received wide discussion, we shall limit ourselves to an attempt to test their reliability. We shall, therefore, proceed to take up the figures by industries.

As regards automobiles, the figures of sales as published by the various organizations in the industry are

fairly precise. In the case of furniture the situation is a little different. Ayres puts the retail sales at one billion, compared to the figures of nine hundred millions as given by the Farmers' Loan and Trust Company; while those of Nystrom are considerably higher. Our own calculation is a little different. The *Biennial Census of Manufactures* for 1925 gives the following figures of production:

Household furniture	$631,312,907
Other furnishings	40,674,649
Total	671,987,556
Excess of imports over exports	945,869
Leaving a net sum of	$672,933,425

or, let us say in round figures, $673,000,000, as the value of manufacturers' prices for furniture designed for retail trade. In order to ascertain the retail value we must, of course, add the mark-up[1] charged by the retailers. Estimates of mark-up furnished to us by a large number of reliable retail dealers vary from 35.4 per cent to 48 per cent, and in one case even to 52.5 per cent. The figure 43 per cent has accordingly been taken as the proper average, representing the margin of gross profit of the retailer. This would result in a total volume of retail sales of furniture of $1,181,000,000. This is considerably higher than the estimate of Ayres; but is lower than that of Nystrom, who does not limit himself to articles sold in furniture stores.

We come in the next place to pianos. Here the 1920 census figures of production are $93,640,000, while the excess of exports over imports is $5,429,000. This leaves

[1] The term "mark-up" is used in the accepted sense as referring to the percentage of the selling price represented by the profits of the dealer.

the net value of pianos designed for domestic retail trade as $88,211,000. As reported by most of the piano dealers themselves, the mark-up, including the carrying charges, amounts to about 58 per cent. This leaves the total retail trade at $210,000,000—a figure which compares fairly well with that of Ayres, although somewhat smaller. The statistics given by Nystrom are not comparable because they include organs and similar articles.

Finally as regards jewelry, the most reliable figures are those of the Internal Revenue Bureau, which show the amount of tax collected on jewelry sold at retail. According to these tables, the volume of jewelry so sold in 1924 was found to be $450,000,000, somewhat less than the figures given by Nystrom for 1923. For the year 1925 the information at our disposal would lead us to estimate that the volume of retail sales has diminished by about 10 per cent, so that Ayres's estimate in this case may be considered accurate.

As regards the other lines, there are no means of checking the guesses or estimates. They must accordingly be taken for what they are worth.

We have thus far considered the statistics of total sales, and have found comparatively little to criticize. Quite different, however, is the situation when we come to consider the proportion of retail sales that are made on the instalment plan. Here we may consider, as most commonly deemed worthy of credence, the figures of the Farmers' Loan and Trust Company and of Ayres.

The estimates of the Farmers' Loan and Trust Company are found on the following page.

These figures, it will be observed, do not include clothing nor some of the other items mentioned by Ayres, the addition of which would bring the total to considerably over $5,000,000,000.

We come next to the estimate of Ayres. On the fol-

TABLE XI

VOLUME OF RETAIL SALES MADE ON THE INSTALMENT PLAN

(*Farmers' Loan and Trust Company's estimate*)

Product	Value
Automobiles	$2,182,561,878
Washing machines	66,000,000
Vacuum cleaners	44,850,000
Phonographs	56,000,000
Furniture	765,000,000
Pianos	40,000,000
Jewelry	100,000,000
Radio	39,000,000
	$3,293,411,878

lowing page there will be found his table of instalment sales, which includes also his estimates of instalment paper outstanding, and of the percentage of increase or decrease.

The estimate of Ayres, it will be seen, is to the effect that the total volume of instalment sales at retail amounts to about 5¾ billion dollars; that the total volume of instalment paper issued during a twelve-month period is about 4½ billions; and that the amount outstanding at any one time is well over 2½ billions. Let us test the reliability of these figures according to the best information that has become available to us.

In the absence of accurate statistics, the common method, employed also by Ayres, is to take the opinions of those engaged in the particular line of business as regards the total volume of sales, the percentage of instalment sales, the proportion of down payment, and the lapse of time that ensues from the original purchase to the final payment. In other words, the common estimate depends almost entirely upon mere

TABLE

RETAIL INSTALMENT SA

(RECKONED IN MIL

(AYRES'S

	Retail Cash Selling Price	Per Cent Sold on Time	Cash Price Goods Sold on Time	Per Cent Down Payment
New passenger cars	2,879	76	2,188	33 3
New trucks	567	80	454	"
Total new automobiles	3,446		2,642	"
Used cars and trucks			881	40
Total automobiles			3,523	
Household furniture	1,000	70	700	15
Pianos	225	90	203	15
Phonographs	200	80	160	25
Radio sets	225	75	169	25
Washing machines	105	90	95	10
Vacuum cleaners	60	85	51	15
Sewing machines	100	90	90	10
Gas stoves	35	70	25	15
Mechanical refrigerators	15	90	14	15
Jewelry store goods	400	25	100	20
Clothing, instalment house			90	15
Clothing, ten-payment plan			185	25
Total clothing	5,500	5	275	
Property improvements			100	25
Tractors	95	75	71	33 3
Other farm machinery	280	10	28	20
All other			100	20
Grand total			5,704	

XII

LES IN THE YEAR 1925

LIONS OF DOLLARS)

ESTIMATE)

Amount Deferred Payment	Per Cent Carrying Charge	Total Instalment Paper	Selling Price of Instalment Goods	Average Time to Complete Payment	Average Amount Outstanding 1925	Outstandings 1923	Per Cent Increase 1923 to 1925
1,459	10	1,605	2,334	12 mo.	869		
302	10	333	485	" "	180		
1,761	10	1,938	2,819	" "	1,049		
528	15	608	961	" "	329		
2,289		2,546	3,780	" "	1,378	1,378	0
595	15	684	789	18 "	542	471	15
172	18	203	234	24 "	212	212	0
120	12	134	174	14 "	84	80	5
127	10	139	181	6 "	41	13	215
85	10	94	104	12 "	51	44	16
43	10	48	56	9 "	20	18	11
81	20	97	106	18 "	77	73	5
21	10	23	27	12 "	12	11	9
12	15	14	16	18 "	11	2	450
80	10	88	108	10 "	40	32	25
77	10	84	97	25 wks.	21		
139	0	139	185	10 "	15		
216		223	282		36	20	80
75	10	83	108	12 mo.	45	23	96
48	10	52	75	" "	28	25	12
22	10	25	31	" "	13	12	8
80	10	88	108	" "	48	24	100
4,066		4,541	6,179		2,638	2,438	

guesses. These are just as good or as bad as the individuals who do the guessing, and are subject to all the infirmities of human nature, especially when the figures are seen through the roseate spectacles of hope and of self-interest. In the case of the figures given by Ayres, the first question is as to whether his selection of guessers is good, and whether the technical procedure followed in combining the guesses is reasonable. We have also made a selection of guessers, and it will be interesting to compare our guesses—for in many cases the estimate can scarcely be called more than that—with those of Ayres. In a few instances, however—and fortunately in the most important cases—we have been able to supplement this system of guesses by a somewhat less vulnerable procedure. This, although by no means satisfactory, is the best available under the circumstances, and, as we shall see, results in conclusions widely at variance with those of Ayres.

Before we take up Ayres's figures in detail, we may point out that he has included property improvements, tractors, and other farm machinery, whereas we have preferred to restrict ourselves to those commodities which are more commonly understood to fall within the limits of retail trade. Without such a restriction we should find ourselves engaged in a study of credit extensions on railroad equipment, printing presses, and a large variety of other analogous commodities which do not belong within the field of consumption.

It might be said that a parity of reasoning would lead us to exclude automobile motor trucks and even business passenger cars, as well as office furniture and electrical refrigerators used by butchers. This, however, brings up the entire distinction between production goods and consumption goods, which we shall discuss later in detail (Chapter VII), and which will lead us to the conclusion that the so-called consumption goods may

sometimes be used productively. While there is no doubt as to the character of the production goods, there are no statistics available in the case of the so-called consumption goods to enable us to decide as to the exact purposes to which they are to be applied. At all events, however, tractors and farm machinery ought to be eliminated from the list as not within the field of instalment selling in the sense of consumption credit.

Taking up, then, the so-called consumption goods proper, let us begin with those classes of business in which only the guessing method is practicable. Despite all efforts to secure results which may lay claim to scientific accuracy, repeated endeavor on our part has proved to be unavailing. For really satisfactory figures, we must await a far more comprehensive investigation, perhaps under government auspices.

It so happens that most of these businesses to which only guessing methods are applicable are of relatively minor importance. We shall, therefore, discuss them under the head of the minor industries, although, as we shall see later, one of these minor industries is susceptible of more accurate study and will be discussed in the next section.

2. Instalment Sales in the Minor Industries

We begin with pianos. The census figures of production are $93,640,000, while the excess of exports over imports amounted to $5,429,000. This would leave the net value of pianos designed for domestic trade at $88,211,000. Figures which we have obtained from piano dealers lead us to accept 58 per cent as an average mark-up. This technical phrase means that the $88,211,000 represents the difference between 58 per cent and 100 per cent, or 42 per cent. Consequently 100 per cent, which represents the total volume of the retail trade, is 210 millions. Ayres's estimate of 225 millions

appears therefore to be somewhat too high, especially when it is remembered that the mark-up used in our estimate includes the carrying charges as well.

With reference to the percentage sold on instalments, the estimates received by us vary in individual cases from 80 to 95 per cent. Ayres uses the figure of 90 per cent, which is probably a little too generous. So far as the problem of down payment is concerned, the figures used by Ayres, namely 15 per cent, are in accordance with our own results.

On the other hand, Ayres estimates the average length of the instalment period at twenty-four months. The authorities which we have used, on the contrary, agree in putting the average length of the notes at about thirty months. The lower retail value disclosed by our above figures, however, offsets the longer term, so that when we come to an estimate of the amount of instalment paper outstanding, our figure is about 207 millions, or only 5 millions less than that of Ayres.

In the phonograph business the discrepancy between the estimates of Ayres and our own figures is considerably more marked. This is due largely to the estimate as to the volume of total sales. The census figures of manufactures and production indicate that the value of the manufactured products is only 25 millions. To this must be added a mark-up, which we figure at 40 per cent, basing the estimate on information from Crane's *Market Data Book* for 1924, and raising it to allow for changed conditions in the industry. The high figure is taken in order to compensate for diminished sales. The result indicates that the value of all retail sales is 41.7 millions, instead of the 200 millions given by Ayres.

The percentage of phonographs sold on time may be taken at 80 per cent, which corresponds to the figure

given by Ayres, although our own sources of information give figures which vary from as low as 60 to as high as 90 per cent. As regards the proportion of down payment, Ayres has taken 25 per cent, whereas all of our informants without exception agree that 10 per cent is the proper figure. So far as concerns the average time in which to complete the payment, Ayres gives fourteen months, whereas our informants present a large variety of practices ranging from six to eighteen months. A more probable guess than that of Ayres would accordingly be ten instead of fourteen months.

In the case of phonographs, therefore, our estimates, which differ markedly from those of Mr. Ayres, are as follows:

TABLE XIII

RETAIL INSTALMENT SALES OF PHONOGRAPHS IN THE YEAR 1925 (ESTIMATE BASED UPON RESULT OF SPECIAL INVESTIGATION)

Items	Millions of Dollars	Period	Per Cent
Value of manufactured products	25		
Mark-up			40
Volume of retail sales	41 7		
Percentage on instalment			80
Amount on instalment	33 4		
Down payment of 10%	3 3		
Amount of instalment paper	30 1		
Average period over which instalments are spread		10 mo.	
Average amount of instalment paper outstanding	13 7*		

* The formula for the reduction of the total amount of instalment credit granted during a certain period of time to the average amount outstanding during the same period is derived as follows. The period in question is divided into a number of shorter periods equal in length to the intervals between one instalment payment and the next. It is assumed then that the amount of instalment credit granted during each of these shorter periods is the same. This assumption is legitimate, since we are seeking to ascertain the formula for the *average* amount outstanding. Let us then denote the amount of credit granted in each of the shorter periods as unity, and the average number of such periods which intervene between the extension of an instalment loan and its repayment in full by n. Now it should be clear that, on the average, the number of instalment loans that are outstanding in full or in part at any one time

We come next to radio sets. Owing to the novelty of the business, this presents a difficult problem. There are, for instance, no standard terms at all, each dealer

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is equal to n, if the repayments are made according to schedule. When the $(n+1)$ instalment loan is extended, the loan granted n periods before is being repaid in full, so that the number remaining outstanding is only n. The same reasoning should apply to the period when the $(n+2)$, $(n+3)$, and so forth loans are extended. Were each of these loans outstanding in full, the total amount outstanding at any one time would have been n, since the magnitude of each loan is denoted by unity. But the amount of loans outstanding is less than that, inasmuch as only one of these loans is outstanding in full. All the loans made in periods preceding the one which we choose as our observation period are repaid in part. The loan made n periods before the observation period is repaid in full; but on the loans made $(n-1)$ periods before, $(n-2)$ periods before, $(n-3)$ periods and so on, only $(n-1)$ payments, $(n-2)$ payments, $(n-3)$ payments and so forth up to one payment were made. Since we agreed to denote each of the loans by unity, and since each is repayable in n equal portions, each payment is equal to $\frac{1}{n}$. Thus, the sum of payments made on the loans outstanding is equal to

$$\frac{n-1}{n}\ \frac{n-2}{n}\ \frac{n-3}{n}\ldots\ldots\ldots\ldots\ldots\ldots\ \frac{2}{n}\ \frac{1}{n}$$

which, being the sum of the terms of an arithmetical progression, is equal to $\frac{n-1}{2}$.

Since the original amount of the n loans is n, and since the amount received in part payment of these loans is $\frac{n-1}{2}$, the amount outstanding at any one time is

$$n-\frac{n-1}{2}=\frac{n\mp 1}{2}.$$

Our formula, however, is designed to give us the ratio of the average amount outstanding to the total amount of credit granted during a definite period of time. If we denote the number of shorter periods (equal in length to the interval between two successive instalment payments) contained in this period of time by k, this symbol will also represent the total amount of instalment credit granted during this period of time. The formula for the ratio of average outstanding to total amount granted will appear then as $\frac{n+1}{2k}$. In using this formula we must remember that the periods, the number of which is denoted by k, are the same.

Now let us apply this formula in an attempt to obtain the average amount outstanding in our estimate of phonograph instalments. Instalment payments are completed, on the average, in 10 months; this figure accordingly represents the value of n in the formula. Since n stands for the number of months, k should stand for the number of months in a year, the period for which the total volume of instalment paper is known. Thus, our formula turns out to have the value of $\frac{10+1}{2\times 12}\ \frac{11}{24}$, which is the coefficient to be applied. In order to reduce the total amount of instalment paper to the average amount outstanding, we multiply the former by $\frac{11}{24}$; consequently the average amount outstanding is 30.1 times $\frac{11}{24}=13.7$ millions of dollars.

pursuing his own practices, which vary widely from those of his competitors. In the same way, in attempting to secure an estimate of the volume of the business, it has been found impossible to obtain any figures on mark-up which would be generally accepted. It therefore seems better to accept the estimates made by the Radio Manufacturers Association. Their figures for the volume of retail trade for 1925 were 175 millions, and for 1926, 225 millions. Ayres's estimate of 225 millions is in all probability based upon their prediction for 1926, and is evidently too high for 1925.

So far as concerns the amount sold on time, the estimates present particularly wild guesses. One of our sources guesses 50 per cent, another 90 per cent. Most of the informants decline to make any estimate whatever, stating that the business is too new to warrant a reasonable estimate of any kind. Attention is called to the fact that the radios are still appealing to the rich, and that a large number of instruments are consequently being sold for cash. From that point of view, Ayres's estimate of 75 per cent may be criticized as being overgenerous. But where all the doctors disagree, there is perhaps no basis for criticizing his guess.

So far as down payment is concerned, the information at our command results in a figure which varies from 20 to 25 per cent. Ayres's estimate of 25 per cent is in accord with the highest guesses. So far as concerns time, the guesses presented to us vary from four to twelve months, the last estimate, however, being applicable only to the highest-priced instruments. Ayres's estimate of six months is, therefore, acceptable. Taking it all in all, Ayres's estimates are fairly accurate, although apt to err on the side of exaggeration.

Among the most recent examples of instalment selling are washing machines and vacuum cleaners. The total number of washing machines sold in 1925 has been

credibly estimated at 732,223, sold at an average retail price of $140. This would result in a total volume of sales of $102,511,000. A similar estimate is that of the American Washing Machine Manufacturers Association, although the total of sales amounting to $103,500,000 represents an estimate of 6,000 units less than the number comprised in the preceding estimate. Ayres's estimate of $105,000,000 would, therefore, seem to be fairly accurate, although probably erring on the side of excess. With reference to the proportion sold on instalments, every one of our informants agrees that the proportion should be 80 per cent on time sales. Ayres's figure of 90 per cent, therefore, seems again to be a little high. So far as down payment and length of time are concerned, our information agrees with that of Ayres.

As to vacuum cleaners, the information at our disposal is that the number of units disposed of in 1925 was 957,850, sold at an average price of $50. This would make the volume of sales 48 millions, while Ayres gives an estimate of 60 millions. In other respects there is but little difference.

In the case of sewing machines and gas stoves, the figures secured by us are in fair agreement with those of Ayres, which may therefore be passed over.

Finally, as to clothing, the figures of Ayres seem to call for comment in only one respect. He gives the amount sold on the instalment plan as 5 per cent of the whole. This is indeed less than some of the wild guesses that are often found; but it appears, nevertheless, to be somewhat exaggerated.

Summing up these minor examples of instalment selling, we have learned that while some of Ayres's figures may properly be challenged, and while on the whole he tends to be over-liberal, yet, in view of the fact that all of the estimates represent nothing but

guesses on the part of those concerned, the figures given by Ayres present a fairly reliable picture of the views of those engaged in the various lines of business.

When, however, we come to those commodities where it has been possible to secure specific data, it will be seen that there is a wide discrepancy between the ordinary guesses on the subject as shared by Ayres and the results obtained by more careful methods of calculation. The three industries in which it has been possible for us to make actual investigations are automobiles, furniture and jewelry. What now are the results in these respects?

3. Instalment Sales of Automobiles, Furniture, and Jewelry

As regards automobiles, certain figures may be accepted as fairly accurate. There is consequently general agreement as regards the number produced, exported, and sold from year to year. Furthermore, the terms on which sales are made on instalments have been standardized to such an extent that the figures in these respects also may be considered fairly satisfactory. The real problem consists in estimating the number of cars sold on the instalment system. Before, however, we take up this point, it may be well to comment on the procedure followed by Ayres in arriving at the amount of instalment paper.

So far as concerns the estimate of instalment paper on new automobiles, his figures are in harmony with those usually accepted. In estimating the amount of paper on used cars, however, a criticism is to be urged. He has here employed a ratio of used-car paper to new-car paper which seems to be established by the experience of most of the finance companies. In the absence of more direct statistics, there is no objection to this procedure. It appears, however, that the estimates

purporting to have been used by Ayres are to the effect that one-fourth of all the paper bought by the finance companies consists of paper on used cars, or in other words, that there exists a 3 to 1 ratio between the new-car instalment paper and the amount of used-car instalment paper. Accepting the validity of this ratio, it is clear that one-third of the total volume of instalment paper issued on new cars should then be accepted as the amount of instalment credit granted on used cars. Ayres, on the other hand, takes one-third of the total selling price of new cars and arrives at a figure which he represents as the cash selling price of used cars sold on time. In other words, by taking one-third of 2,642 millions (the estimated cash price of new automobiles sold on time), Ayres obtains a result of 881 millions, which he accepts as the selling price of used cars sold on time. After the down payment is subtracted and carrying charges are added, this amount is reduced to 608 millions, which, according to Ayres, remains as the total amount of instalment paper on used cars.

The correction that we suggest is that the figure showing the volume of used-car instalment paper should have been obtained directly from the figure representing the amount of new-car instalment paper. In other words, one-third of the latter amount (i.e., $1/3 \times 1{,}938$ millions) gives a result of 646 millions of paper on used cars as contrasted with Ayres's figures of 608 millions. An annual volume of 646 millions of used-car instalment paper represents, to use Ayres's percentages, average outstandings of 350 millions. We shall, therefore, have to correct Ayres's figures of 329 millions of average outstandings of used-car paper, and add to it the sum of 21 millions, thus reaching this figure of 350 millions. This gives us a total of 1,399 millions as the entire volume of automobile paper outstanding.

While this criticism is only of minor consequence as

affecting the methods employed by Ayres, and while it results in only unimportant differences in conclusions, the situation is quite otherwise when we attempt to revert to the primary problem of the total amount of instalment sales. Ayres used the ordinary estimates. The common guess varies from 75 to 80 per cent, and these figures are accepted by Ayres; namely, 76 per cent on new passenger cars and 80 per cent on new trucks.

We have, however, been able to substitute for these guesses a somewhat more accurate estimate. Through the courtesy of the General Motors Acceptance Corporation, we have been put into a position to examine the records of 1,925 dealers, covering no less than 24,375 transactions distributed among the various makes. These records were obtained from the individual dealers. Our procedure in dealing with the information presented in Appendix Five may be summarized as follows: The ratio of instalment sales to total value of new cars was computed for each unit. The ratios were then weighted according to the total volume of sales of the particular unit involved. The weighted ratios thus obtained were used in order to arrive at an aggregate figure which represents the percentage that the volume of instalment sales bore to the total volume of all cars, old and new. Without going into the details of the calculations, it may be said that the result so secured showed a proportion of instalment sales of 59 per cent. A similar calculation was made on the car sales for 1926, the number of transactions now amounting to 34,381. The proportion of instalment sales in this case was found to amount to 57 per cent of the whole.

Thus it will be seen that on transactions covering more than 58,000 sales of individual cars, the average percentage of those sold on time was under 59.

When we consider the price range of all the cars

involved, it may fairly be claimed that the results are typical of the automobile industry in general. Yet a percentage of 59 is very much less than that of 76, as usually accepted and as followed by Ayres. Reducing it to exact figures, 59 is 22.4 per cent less than 76. In our opinion, therefore, the figures both of instalment sales and of instalment paper outstanding, as presented by Ayres, are much exaggerated.

If we take Ayres's estimate of the average amount of automobile paper outstanding as 1,378 millions, and make the correction referred to above by adding 21 millions, resulting in a total of 1,399 millions, and if we proceed to diminish that total by 22.4 per cent, as explained above, the amount of automobile paper outstanding would be only 1,086 millions. In other words, in the case of automobiles, the outstanding instalment is in reality only a little over a billion dollars.

In the case of furniture our investigations were not so detailed, but the computations nevertheless result in figures quite different from those reached by Ayres. Our figure, reached as a result of the computation set forth in detail on page 97, is 1,181 millions. In this case the estimate given by Ayres, namely 1,000 millions, seems conservative.

In the same way, Ayres's estimates of terms are also conservative. His figure of 70 per cent of the amount sold on time agrees with our figures so far as concerns furniture ordinarily sold by department stores; but it is far lower than the figures presented to us by businesses that deal in furniture alone and largely in furniture on the instalment basis. The percentage as given to us by a large number of establishments varies from 80 to 90 per cent, so that we should be justified in using at least 80 per cent. So far as concerns down payment and the length of the period involved, Ayres's

estimates coincide with those usually accepted and with such opinions as we have been able to obtain.

Using the figures revised as above, the results would be as follows:

TABLE XIV

RETAIL INSTALMENT SALES OF FURNITURE IN THE YEAR 1925

(ESTIMATE BASED UPON RESULT OF SPECIAL INVESTIGATION)

Items	Millions of Dollars	Period	Per Cent
Volume of retail trade	1,181		
Volume of instalment sales	945		80
Down payment	142		15
Amount of instalment paper, arising from year's sales	803		
Length of period over which instalments are spread		18 mo.	
Furniture paper outstanding	636		

Ayres, in this instance, has been conservative in his selection of estimates.

The situation, however, assumes a different aspect when we consider the following facts. The statistics presented to us by the various dealers show that while one-third of the total annual sales are represented by outstandings, these outstandings include all forms of credit and not simply instalment paper. The open book-account credit is stated by the furniture dealers to be on an average of 25 per cent of all the credit granted. If we take one-third of the total volume of sales as representing the total volume of credit outstanding, and if we then deduct 25 per cent of this—in other words, if we take 33.33 per cent and deduct 8.33 per cent—we get as a result a figure of 25 per cent as the proportion of the total volume of sales represented by instalment paper outstanding at any one time. This is quite different from the not comparable figure of 70 per cent, utilized by Ayres.

If we were to substitute an estimate of our own for that of Ayres, it would be as follows: The volume of business according to the calculations mentioned above we have estimated at $1,180,000. This, however, is based solely on the amount of furniture sold. The best opinion seems to agree that furniture stores sell about one-fourth as much house furnishings and other miscellaneous articles as they sell furniture. We thus reach an aggregate of $1,476,000,000 as the total amount of furniture and house furnishings sold at retail.

Inasmuch as only one-third of this amount, as stated above, is outstanding at any one time as the result of the extension of credit of all types, the figure of 492 millions represents all outstanding credit based on the sale of both furniture and house furnishings. Accepting this sum of 492 millions, which includes book accounts as well as instalment sales, it seems clear that Ayres's estimate of 542 millions for outstanding instalment paper alone is excessive.

We come finally to jewelry. The first point is as to the total volume of sales. If we use the Internal Revenue figures which disclose the amount of the tax collected on jewelry sold at retail, the volume of jewelry sold in 1924 is found to be 450 million dollars. The figures for 1925 are not yet available; but our own investigations indicate a drop of approximately 10 per cent in the sales as compared with 1924. The estimate of 400 millions made by Ayres may therefore be accepted as satisfactory. The same may be said as to his estimate with reference to terms, which are in harmony with the usual opinions. On the other hand, there seems to be a wide discrepancy when we come to consider the amount of instalment sales.

Statements secured by us from a large number of jewelry stores show actual accounts outstanding for the year 1925 amounting to 16 per cent of all sales. Accord-

ing to Ayres, the estimates for the average sum of instalment notes outstanding in jewelry amounted in 1925 to 40 millions, which is 10 per cent of the entire volume of transactions. This would imply that ten-sixteenths of all credit outstanding is represented by instalment sales. When we reflect, however, that many of the department stores, as well as not a few of the jewelry shops, do no instalment business whatever; and that in the jewelry business in particular instalment selling is limited to dealers who specialize in this form of credit, such a high ratio is extremely improbable.

Inasmuch as the figures with reference to terms seem to be accurate, the result would be that Ayres seriously exaggerates the percentage of the instalment sales with consequent over-estimates in the other columns.

A recent survey by the National Jewelry Board of Trade shows a total of 2,196 jewelry stores in the United States which do an instalment business. The survey classes them into nineteen groups on the basis of net business worth. A study of the financial statements contained in the files of the Board of Trade discloses the fact that the ratio of sales to net business worth for the last five years has been about 2½ for stores with a worth under $100,000, and 2 for the larger stores.

As a result of these estimates, we find that the total volume of sales of the instalment stores was 50¾ millions. This, it will be seen, is only about one-half of the amount as estimated by Ayres. Utilizing the current figures as to terms, which are also found in Ayres's exposition, the result would be that the average outstandings are only about 20.3 million dollars.

In arriving at this estimate, it must be recognized that some of the sales made by these houses are for cash. On the other hand, it is undoubtedly true that some instalment business is done by other stores where the practice remains unknown to the National Board of

Trade despite all their efforts to the contrary. We have assumed that the cash sales in the instalment houses are offset by instalment sales in other stores. The estimates presented above may, therefore, be credibly accepted as representing the total sales of retail jewelry.

Confidence in the reliability of our very low estimate is strengthened by the consideration that the low-price articles represent a large portion of the total value of the jewelry sold. The drop in the 1925 returns from the sales tax on jewelry, when this tax was abolished on articles selling for less than thirty dollars, indicates that about 220 millions (of a total of about 400 millions) of the jewelry sales were represented by articles selling for less than thirty dollars.

If then we combine the three industries in which we have been able to secure more accurate figures, the result as to outstanding instalment paper would be as follows:

TABLE XV

SUMMARY OF OUTSTANDING INSTALMENT PAPER IN THREE MAJOR INDUSTRIES

(RECKONED IN MILLIONS OF DOLLARS)

Industry	Amount of Outstandings Based upon Estimates	Amount of Outstandings Based upon Results Obtained in Special Investigations	Reduction of Prior Estimate Effected by Results Obtained in Special Investigations
Automobile	1,399*	1,086	313
Furniture	636†	492	144
Jewelry	40‡	20.3	19.7
Sum Totals	2,075	1,598 3	476.7

* See p. [illegible] for the source of this estimate.

† See p. 113 for the source of this estimate.

‡ Ayres's estimate.

4. Conclusions

The above conclusions show that the total figures of outstandings as estimated by Ayres for these three lines alone would have to be reduced about 23 per cent in order to conform to actualities. Since automobiles and furniture alone probably represent three-fourths of all the instalment paper, it is presumably safe to assume a similar discrepancy in the case of the other articles where we have found nothing but market figures or pure guesses. If, however, we correct Ayres's table for only those lines as to which we disagree, a considerable discrepancy appears. The results of such correction are represented in the following table:

TABLE XVI

FINAL REVISED ESTIMATES

(RECKONED IN MILLIONS OF DOLLARS)

Goods	Selling Price of Goods Sold on Time	Average of Instalment Paper Outstanding
Automobiles, total	2,734	1,086
Furniture*	850†	492
Pianos	189	207
Phonographs	33.4	13 7
Radio	169	41
Washing machines	95	51
Vacuum cleaners	51	20
Sewing machines	90	77
Gas stoves	25	12
Refrigerators	14	11
Jewelry	50.75	20.3
Clothing	275	36
Property improvement	100	45
Tractors	71	28
Other farm machinery	28	13
All other	100	48
Total	4,875	2,201

* Data include all credit on furniture and house furnishings.

† This figure allows for a decrease in both the percentage sold on instalments and the length of time to complete payments.

Utilizing the above figures, we are now in a position to arrive at a final conclusion as to Ayres's estimates. In the table below will be found the totals, first, of Ayres's original estimate, then of the corrections made by us in Ayres's estimate on the basis of usual opinions, and thirdly, Ayres's estimate as corrected on the basis of the more accurate facts ascertained by us. This comparison of the three estimates is given below:

TABLE XVII

COMPARISON OF ESTIMATES OF OUTSTANDING INSTALMENT PAPER

(RECKONED IN MILLIONS OF DOLLARS)

Estimate	Cash Selling Price	Average Amount of Instalment Paper Outstanding
I. Ayres's estimate.	5,704	2,638
II. Ayres's estimate, corrected and revised on basis of current opinion.	5,864	2,678
III. Ayres's estimate, corrected on basis of data in 3 particular industries	4,875	2,201

There is, however, one correction to be made. The last four items in Ayres's tables ought to be omitted, as we have seen above (page 103), as not pertinent to the instalment selling of consumption goods. Deducting these items, the volume of instalment sales would be reduced to 4,574 millions; and the average amount of outstanding instalment paper would be reduced to 2,067 millions. In other words, instead of well-nigh 6 billion dollars of instalment sales as estimated by Ayres, our estimate of the volume of instalment sales of so-called consumption goods usually sold at retail results in the figure of about 4½ billions out of a total volume of such retail sales of some 38 billions. Similarly, instead of Ayres's

estimate of 2½ billions of instalment paper outstanding, our estimate is a little over 2 billions. It must be remembered, however, that our figures include only those consumption goods to the sale of which the system of instalment sales is deemed generally to apply in large measure.[1] To give a more exact estimate as to the total volume of all instalment sales of consumption goods, it would be necessary to present figures of every occasional transaction of this nature in the case of commodities not usually sold on the instalment basis. These figures it is manifestly impossible to secure.

When the above figures are compared with the wild guesses that are common, they will appear perhaps unduly conservative. But they are none the less an eloquent indication of the importance that has been assumed by instalment selling in our modern economic life.

[1] Some figures as to the relations of mark-ups, turnover, profits, etc., to the percentage of business done by retail stores will be found in the report of the Federal Trade Commission on "House Furnishing Industries," Vol I, *Household Furniture*, 1923, pp 100-137.

PART TWO

ANALYTICAL

CHAPTER V

INTRODUCTORY: THE APPROACH TO THE SUBJECT

1. Current Opinions on Instalment Selling

There is no topic in modern economic life which has given rise to a wider variety of opinions than that of instalment sales. These expressions of opinion have thus far been promulgated for the most part by business men, and by journalists, who generally reflect, rather than analyze, the opinions of business men. They have gone through the whole gamut from enthusiastic approval to unmeasured condemnation. To some, instalment selling has brought about a revolution as profound and as salutary as the industrial revolution; and to it is ascribed the phenomenal prosperity which the United States has of recent years enjoyed. To others, instalment selling is a danger of the first magnitude, calculated to undermine not only business prosperity, but the morale of the American people.

These judgments are for the most part summarily stated as mere expressions of opinion, or are developed at somewhat greater length in pamphlets and addresses. In not a single case does the conclusion rest upon either a broad investigation of the facts or a comprehensive study of the theory.

It may, therefore, be pertinent to point out that, almost without exception, the views hitherto formulated have been the unconscious reactions of the interests, the fears, the desires or the prejudices of the individuals concerned. To the merchant whose business seems actually to suffer from the introduction of the new methods, instalment selling appears a dangerous

innovation. As for the individual who is engaged in instalment selling, it is not surprising that he should identify his own prosperity with the common weal. Finally, so far as concerns the banker, offered a multiplication of finance paper without adequate means of forming a definite opinion as to its safety and liquidity, it is quite comprehensible that he should feel some doubt and suspicion. Every one, in short, is apt to regard these new phenomena from his own standpoint. It is so much easier to take a subjective, rather than an objective, point of view.

Not only is there this difference of opinion among the individuals favorably or unfavorably affected by the new method, but there is also a similar discrepancy of opinion among the various classes of consumers. The judgment of the individual consumers who are the usual beneficiaries of our charitable organizations is very different from the conclusions reached by the consumers that belong to a higher income group. The views of the representatives of trade unions do not coincide with those that are enunciated by the professional class or by the small capitalists.

It may be worth while to test the accuracy of the above statements by an analysis of the current opinions. We have taken these opinions as found in the public press and in the published addresses on the subject, and have analyzed them in the tables below.

Sixty-seven opinions as expressed on some aspects of instalment selling have been digested. The opinions have been taken as they were given, regardless of whether the individual quoted was condemning or praising the system, and irrespective of whether he was referring to the whole or to only a part of the instalment practices. To a certain extent, the approach to the problem is indicated by the standpoint occupied.

The column headed "Point of View" shows whether

the individual quoted is considering instalment selling primarily from the standpoint of the business using the system, or whether he is taking the broader view and is attempting to pass judgment upon the effects of instalment selling either upon consumers as a whole or upon the general social and economic structure. These three points of view (i.e., of the business, of the consumer, and of the general social and economic structure) are indicated by the letters B, C, and G, respectively.

Where an opinion is favorable or unfavorable according as the business in which the individual is engaged is thought to be benefited or injured by instalment selling, the opinion voiced is assumed to be "logical," and the word "Yes" appears in the last column. Where the business of the individual in question is not of such a nature as to encourage a definite opinion one way or another, there is no reason for assuming that his conclusions are influenced by his business; and as a consequence, the space under "logical" is left blank. Where the nature of the business is unknown, a question-mark is placed in the column. Names are for obvious reasons omitted, but they can be checked up without much difficulty by consulting the bibliography which lists the sources of the opinions used in this analysis.

From these tables it appears that the opinion of each individual quoted can almost without exception be accurately predicted by taking into account the fact as to whether his own business interests are favorably or adversely affected or, at all events, whether he thinks that they will be so affected by instalment selling.

This conclusion is neither surprising nor regrettable. It is in the first place not surprising. The average business man, although he knows a great deal about the subject, nevertheless views it from his particular angle of approach; or, to change the metaphor, while he looks through a microscope more or less unavailable to

TABLE XVIII

OPINIONS FAVORABLE TO INSTALMENT SELLING

Individual Number	Business Interest	Point of View*	Is the Opinion Logical?
A. From those engaged in instalment selling			
1	Publisher	B & G	Yes
2	Department store	B	"
3	Trunks	G	"
4	Phonographs	B	"
5	Pianos	B	"
6	Radios	G	"
7	Typewriters	B	"
8	Automobiles	C	"
9	Automobiles	B	"
10	Automobiles	B	"
11	Automobiles	B	"
12	Department store	B	"
13	Automobiles	B & G	"
14	Financing autos	B & G	"
15	Financing autos	B & G	"
16	Financing autos	B & G	"
17	Financing autos	B & G	"
18	Financing autos	B	"
19	Financing autos	B	"
B. From those not engaged in instalment selling			
20	Jewelry	C	Yes
21	Merchandising expert	B	—
22	Brokerage	G	—
23	Retail merchandise	C & G	—
24	Banking	G	—
25	Economist	C & G	—
C. Status of instalment business not known			
26	Merchant	C	?
27	Merchant	C	?
28	Dyes	G	?
29	Business machines	B	?

* B—Business. C—Consumer. G—General (social or economic).

TABLE XIX

OPINIONS UNFAVORABLE TO INSTALMENT SELLING

A. From those engaged in instalment selling

None

B. From those not engaged in instalment selling

Individual Number	Business Interest	Point of View*	Is the Opinion Logical?
30	Roofing	C	Yes
31	Cloth mills	B	"
32	Shoes	C	"
33	Shoes	G	"
34	Cloth mills	C	"
35	Men's clothing	C & B	"
36	Clothing	B	"
37	5-and-10-cent stores	B	"
38	Men's clothing	B	"
39	Men's clothing	B & C	"
40	Loan society	C & G	"
41	Retail merchandise	B	"
42	Hardware	B	"
43	Banking	C & B	—
44	Broker	B & C	—
45	Banking	C	—
46	Labor union	B & C	—
47	Banking	C	—
48	Statistician	B	—
49	Magazine	B	—
50	Magazine	B	—
51	Investment house	B	—
52	Magazine	B	—
53	Banking	B	—
54	Magazine	B	—
55	Economist	B	—
56	Banking	B	—
57	Professor	B & G	—

C. Status of instalment business not known

58	Mail orders	G	Yes
59	Department store	B	?
60	Chain store clothing	C & G	?

* B—Business. C—Consumer. G—General (social or economic).

TABLE XX

OPINIONS NEUTRAL TO INSTALMENT SELLING

A. From those engaged in instalment selling

Individual Number	Business Interest	Point of View*	Is the Opinion Logical?
61	Motorcycles	C	—

B. From those not engaged in instalment selling

Individual Number	Business Interest	Point of View*	Is the Opinion Logical?
62	Credit association	B	—
63	Banking	B & G	—
64	Credit association	B	—
65	Economist	B & G	—
66	Economic service	B & C	—
67	Accountants	B	—

* B—Business. C—Consumer. G—General (social or economic).

the ordinary man, he sees through his microscope an enlarged picture of only a small portion of the object.

Moreover, this is, as we have said, not regrettable; in fact, it may be pronounced from some points of view even beneficial. For it shows that one may conceivably be correct from his own point of view without necessarily casting any imputation upon the opinions of those who look at the problem from another point of view.

In a comprehensive investigation like the present, the endeavor must, of course, be a different one. We must attempt, in other words, not only to estimate the validity of each point of view, but also to strike a balance between the values as seen from the varying standpoints. We must seek furthermore to collect, so far as possible, all the facts which throw any light upon the individual point of approach. Finally, we must endeavor to utilize the general conclusions of economic science,

so far as they are applicable to the problems, and to appraise the views of the individual who thinks primarily of his own interests. What we must strive to do, in other words, is to analyze the character of the phenomenon in question, and to estimate, as far as it is possible, its economic effects or repercussions.

2. The Problem

In order to reach tenable conclusions as to the effects of instalment credit, there is needed as a prerequisite a study of its nature and characteristics. As an approach, in other words, to the study of the effects of instalment credit, we must attempt to procure a picture of what is really involved in the phenomenon. From this point of view, a number of preliminary problems present themselves.

It is obvious that instalment selling, at least in the form which has awakened recent attention, has to do with consumers. Instalment credit is a part of the larger subject of consumers' credit. The first problem that presents itself, therefore, is that of consumers' credit in general. What is consumers' credit? Are all forms of consumption credit necessarily to be reprobated? Ought credit to be limited to purposes of production?

The second problem, which is closely connected with the first, resolves itself into the question of the position which consumers' credit has come to occupy in the evolution of credit in general. Is consumers' credit a logical and direct outcome of the earlier types of credit, or does it represent a by-path and a cul-de-sac?

In the third place, if consumers' credit represents a development of credit in general, what are the tendencies observable in recent years in this development? Is consumers' credit as a whole growing, and if so, why? And what are the causes responsible for the various aspects of the movement?

In the fourth place, if we find that the various forms of consumers' credit do not deserve to be lumped together in a wholesale condemnation, ought we not at least to accept the usual distinction between necessaries and luxuries and to say that instalment credit applied to luxuries is to be reprobated?

The next problem affects the relation between consumers' credit in general and instalment credit in particular. Are there any special features of instalment selling which tend to modify the answer that we may have reached with reference to consumers' credit in general? What are the particular advantages, and what are the specific perils in instalment credit as differentiated from consumers' credit in general?

According as we answer these questions, we shall be in a position to apply the conclusions to the various classes of commodities which have recently come into the forefront of the discussion; and, above all, to the automobile. The final problem accordingly concerns the essential nature of the automobile. Is the automobile a luxury or a necessity? Does it represent a consumer's or a producer's good? Is it a good or a bad innovation? What is its real position in the modern economy? Is it socially desirable to stimulate the use of the automobile?

It is only after we have answered the above questions that we shall be prepared to render definite judgments in regard to the effects of instalment selling on our modern economic life. Here, again, however, there arise a series of problems.

In the first place, what is the effect of instalment credit upon the consumer? Is consumer's credit in general, or instalment credit in particular, fraught with possibilities of evil because consumers are irrational? Does credit to consumers tend to rationalize spending, or to accomplish the reverse? Does the instalment plan

operate to distort the judgment of the consumer and, if so, does continued experience with instalment selling tend to correct any such distortion of judgment? Are consumers deceived regarding the finance charges connected with instalment selling? Finally, does instalment credit tend to enslave and to discourage the consumer, or does it, on the contrary, serve to stimulate the consumer to renewed exertions and to greater production?

The second series of problems, closely connected with the first, deals more particularly with the institution of savings. Does instalment credit tend to encourage or to discourage savings? Does it represent a provident or an improvident expenditure? Is it calculated to retard or to accelerate the process of the accumulation of individual and social capital? .

We come in the next place to the effects of instalment credit upon general market conditions. Does instalment selling increase demand, or does it merely advance the time when demand becomes effective? Is it a real or only an ostensible means of enlarging the market? Does it operate to stabilize the demand, and thus to react upon the output? Does it tend to lower the costs of producing the commodity, or do the finance charges increase prices to a point where the power of the community to absorb the product is reduced?

Finally, we are confronted by the series of problems as to the effect of instalment selling on the credit structure in general. Has instalment selling resulted in any net increase of credit to the consumer? Does the conflict of interests between the selling function and the banking function tend to bring about an unsound situation? Moreover, with special reference to the progress of the business cycle, what are the effects of instalment credit? As a period of depression develops, is a large amount of outstanding instalment paper dangerous? Finally, does instalment selling tend to send the peak

of price-swings higher; and will it, as a result, intensify the consequences of a business crisis?

It is only after all these questions have been answered that we shall be in a position to decide as to whether the opposition to instalment credit is justifiable, or whether on the contrary this opposition can be explained as due either to the resentment of those whose interests are adversely affected, or to the undue conservatism of the banking fraternity.

3. The Methods of Attack

It will be recognized that the problems are numerous and difficult, and that any off-hand pronouncement is out of the question. In order to answer the questions with any reasonable hope of success, the student must utilize all the opportunities that are put at his disposal by modern economics. In some respects, the most promising avenue of approach is afforded by inductive research; that is, by a collection of facts which can serve as a basis for the conclusions. Unfortunately, there exist—with minor and sporadic exceptions—no such investigations. An adequate collection of pertinent facts would require years of effort, necessitate large outlays, and occupy the services of a multitude of investigators. Indeed, not a few of the questions mentioned above can be satisfactorily answered only as the result of extended research which could probably be undertaken only by such agencies as are at the disposition of our national government. Many of the needed records in fact do not even exist, because business men are not accustomed to gather them. With the limited resources at our command, it has been possible to institute only five sets of factual inquiries. These may be called respectively, the consumers' study, the merchandise study, the dealer study, the repossession study, and the depression study.

The consumers' study, presented in Appendix Three, is an attempt to utilize the statistical material that is available with reference to the credit granted to consumers by certain retail stores and establishments in the United States. The industries especially studied were the clothing industry, the furniture industry, the jewelry stores, and the hardware concerns.

The second investigation, which we term the merchandise study, represents an attempt to collect the facts as to instalment selling in a variety of industries, beginning with the automobile and extending to furniture, pianos, books, jewelry, and a considerable number of other lines. The material gathered in the dealer study supplied much of the desired information in the automobile industry. Helpful data were also secured from the consumers' study in the furniture, jewelry and hardware industries. Some additional information has been obtained from specific department stores and from firms dealing in furniture and in books. Responses from various piano companies were sufficient to enable us to present a fair picture of the entire industry. In Appendix Four there will be found a more detailed discussion of two of the industries. In the study of the piano business, the experience of a number of concerns has been analyzed more in detail. In the study of the book business, the development of instalment selling has been traced from its very beginnings. With reference to other businesses, where an endeavor was made to secure accurate facts, not a few of the lines proved to be more refractory. The accumulation of data, nevertheless, is not unimpressive.

The third line of investigation, which is called the dealer study, and which is presented in Appendix Five, represents a unique attempt. Through the courtesy of the G. M. A. C., we were able to send a questionnaire to thousands of motor-car dealers, and to accumulate

on a variety of topics information which has never before become available. The question, of course, arises as to how far this cross-section may be considered representative of the industry as a whole. It may be said, however, that the sample is probably large enough to inspire confidence in the conclusions drawn. A larger number would, of course, have augmented this confidence, and an increase in the scope of the data furnished by the dealers would undoubtedly have added to the number and the value of the conclusions. Even thus, however, the conclusions from the study are not lightly to be disregarded.

The fourth investigation, presented in Appendix Six, which we call the repossession study, rests on a finance company's record of repossessions. The conclusions are not so numerous or so far reaching as in the dealers' study, but will nevertheless be found to be of some help.

Finally, an attempt was made to evaluate the influence of a business depression upon an industry which practices instalment selling. Here, again, through similar facilities, we were able to make an investigation—which we call the depression study, presented in Appendix Seven—into the causes and consequences relating to the sales of automobiles in the anthracite coal district of Pennsylvania during the strike period of 1925. Here also some pertinent conclusions were secured.

It has, therefore, been our good fortune to be permitted to avail ourselves of a mass of facts which have not hitherto been at the disposal of investigators.

It will be seen, however, from a mere recital of the studies which it has been possible to undertake, that not a few of the problems of a more general nature still remain unanswered. It has become necessary, therefore, to supplement the inductive studies by a deductive investigation. That is to say, we have been compelled

in several cases to resort to general economic reasoning from premises which are either unchallenged or more or less widely accepted. In the course of these researches, we have found that the body of current doctrine has not always been constructed with reference to the problems which primarily interest us here. Economic science always represents a distillation of the questions propounded to the thinker by the changing facts of economic life. The newer conditions of instalment credit were not present to the older economists, and the analysis of economic life for which they were responsible was one fairly well suited to their own immediate problems. It is, therefore, not surprising to find that in our endeavor to fit the facts of instalment credit into the general structure of economic theory, it has been necessary to analyze anew some of the fundamental concepts of economics, and to re-appraise some of the particular conclusions pertinent to the subject in hand.

Thus our analysis is a product of both inductive and deductive reasoning. As such we present it to the consideration of the academic theorist as well as of the practical business man. For we are convinced of the truth that what is really sound in theory must be workable in practice; and that, on the other hand, what is found to be of ultimate advantage to the business community must be susceptible of being explained in terms of general principles.

While for purposes of clarity we divide this second part into two books, of which we call the first the "Nature and Characteristics of Instalment Credit," and the second the "Effects of Instalment Credit," it must be pointed out that in dealing with the former subject we cannot entirely avert our gaze from the latter. But in so far as we deal at all with the effects of instalment credit in the first part, we treat of them in their more

general aspects; while in the second book we devote our attention more particularly to the special effects of instalment selling on the consumer, the business life, and the credit structure of the community. We endeavor in this way to avoid any overlapping.

BOOK ONE

THE NATURE AND CHARACTERISTICS OF INSTALMENT CREDIT

CHAPTER VI

INSTALMENT CREDIT AND CONSUMPTION CREDIT

1. Instalment Credit as a Part of Consumption Credit

We have seen above that there are two points of view from which we may regard instalment selling. From one standpoint, instalment selling is a part of sales on credit, as opposed to cash sales. Instalment credit is to be differentiated from other forms of credit in that it represents fractional or piecemeal or periodical liquidation, as over against lump-sum liquidation. Inasmuch as all credit rests upon the principle of deferred payments, instalment credit might, therefore, be defined as the system of credit which involves periodical deferred payments in contrast to that of non-periodical deferred payments.

The second point of view refers not to the manner in which the liquidation of the debt is effected, but to the distinction between the purposes for which the system is employed. The point at issue here is as to whether the credit is applied to commodities used for purposes of production, or to what are ordinarily called consumers' goods. The distinction is not between lump-sum credit and piecemeal credit, but between production credit and consumption credit.

Inasmuch as the criterion is so different, this distinction runs athwart the previous one. Production credit, like consumption credit, may be either lump-sum or instalment credit. If a newspaper concern purchases printing presses, or a railway buys rolling stock on credit, the payment is deferred to the future, and may

be made either in a lump sum at the expiration of a certain period or in periodical instalments. In both cases we deal, be it observed, with producers' credit.

On the other hand, if a man desires to buy a suit of clothes and is unwilling to pay cash, the payment may also be deferred and the obligation may either be liquidated in a lump sum at the end of a fixed period or, as in the ten-payment plan, it may be liquidated by successive payments over a series of periods. Regarded from this point of view, instalment selling is applicable to production purposes no less than to purposes of consumption.

As we have seen, however, what is popularly called instalment selling has reference only to the second category. Although articles intended for purposes of production have for a long time been sold on a credit plan involving periodical payments, the term instalment selling, as popularly used, is commonly limited to consumers' goods sold to the individual by the retail dealer. Instalment credit, accordingly, in the common acceptation of the term, has become synonymous with a particular form of consumers' credit, and the problems to which instalment selling is supposed to have given rise are largely connected with the relations of the consumer to the other parties affected by the transaction. The instalment credit with which we are dealing is therefore primarily a part of consumers' credit in general. Before, however, we proceed further with this consideration, it may be well to clear up the uncertainties attaching to the nomenclature.

The distinction is sometimes expressed as that between productive credit and consumptive credit. Both parts of this phrase, however, are objectionable. In the first place, if the word "productive" denotes what it seems to denote, the distinction is meaningless. Productive credit, literally interpreted, means credit that

is productive. This, however, is clearly no criterion of distinction, because all credit is productive, in the sense that it increases the economy of human effort. Even if, as a few thinkers maintain, credit is sometimes non-productive or unproductive, the distinction would then have to be drawn not between productive and consumptive credit, but between productive and unproductive credit. Furthermore, the term "consumptive credit" is to be deprecated as also meaningless. Credit may be applied to articles of consumption, but that does not make it consumptive. Moreover, the term "consumptive" generally connotes the idea of wasting away, as when we speak of individuals afflicted with tuberculosis as consumptives. There is nothing wasting away about the institution of credit. The antithesis of productive and consumptive credit must, therefore, be discarded as either meaningless or inappropriate. It represents an unfortunate attempt to utilize a German verbiage which, however good in the original language, is impossible of application in English.

The better terminology rests on a simpler idea. The idea which it is really sought to convey is that certain kinds of credit are granted to producers, or advanced in order to aid the process of production; and that other kinds of credit are granted to consumers or advanced in order to further the process of consumption. The appropriate terms would therefore be producers' credit as contrasted with consumers' credit or, in a more general way, production credit as over against consumption credit.

Production credit would then mean credit utilized for purposes of production, while consumption credit would denote credit utilized for the purposes of consumption. Or, if we prefer, producers' credit would mean credit granted to producers and consumers' credit would denote credit granted to consumers. In this treatise we

shall use both phrases interchangeably. We defer until later an attempt to explain more particularly what is meant by production as opposed to consumption.

If then we are dealing with consumers' credit rather than with producers' credit, and if instalment selling, in the sense attached to it here, is a variety of consumers' credit in general, it is plain that the problems of instalment selling may be divided into two classes. In the first place, since instalment credit is a part of consumers' credit in general, there must be certain characteristics which are shared in common by both. What is true of all forms of consumers' credit must be true of instalment credit as well. The whole includes the part; the larger comprises the smaller. If we know the characteristics of all consumption credit, we know at all events something about the characteristics of instalment selling.

On the other hand, inasmuch as instalment credit represents a definite category of consumers' credit, there are special problems which are engendered by it. What these problems are depends upon an analysis of the distinction between instalment credit and other forms of consumers' credit, that is, upon an analysis of the consequences which attach themselves to certain conditions involved in the principle of periodical payments. These may be said to constitute additional or special problems over against the general problems involved in consumers' credit. It happens that in practical life these additional problems are of great importance, and that they in some respects overshadow the problems common to all forms of consumers' credit. It is evident therefore that our analysis must be divided into two parts—the tendencies of consumers' credit in general, and the characteristic features of instalment selling in particular.

Before we take up the tendencies of consumers' credit in general, it may be well to study the institution of

consumers' credit as a step in the granting of credit in the wider sense. To do this adequately would necessitate an entire volume. All that is practicable here is to attempt a sketch of consumers' credit in general and of instalment credit in particular as stages in the evolution of credit as a whole. If what is applicable to consumers' credit is necessarily applicable to instalment credit, so in a larger sense what is true of credit in general must also be true of consumers' credit. Let us then endeavor to trace some of the characteristics of the stages of credit in general.

2. Instalment Credit as a Stage in the Evolution of Credit

All credit rests on confidence: the lender must trust the borrower. This trust or confidence reposes on a double basis; the lender must trust the ability of the borrower to meet his obligation at the stipulated date, but he must also trust the willingness of the borrower to meet this obligation. Credit, therefore, is an amalgam of two factors. The borrower may be able to fulfil his obligation, but he may be lacking in the desire to do so. He may be financially solvent but morally defective. On the other hand, the borrower may be entirely willing to pay, but may find himself unable to pay. He may be scrupulously honest and finely sensitive; but he may for one reason or another not be in a position to meet his obligation. Finally, the inability of the borrower to pay may be of two varieties. He may at the outset contract an obligation for which he was never fitted and may accordingly commit himself far beyond his present capacity. On the other hand, he may be completely justified by his present position in contracting the obligation, but he may subsequently be subjected to some accident or some other occurrence

which completely changes his situation, and reduces him from affluence to poverty or from ability to impotence.

The risk accordingly to which every lender or granter of credit is exposed is of two kinds—the risk that can be, or ought to be, foreseen and the hazard that is more or less indeterminate or incalculable. The borrower may either be from the very inception what in the language of the street is called a bad risk, or he may be justly entitled to a good credit rating which may subsequently be invalidated by an unforeseen occurrence. The fundamental problem, therefore, in all credit—whether it be producers' credit or consumers' credit, whether it be lump-sum credit or instalment credit—concerns itself with the credit risk, or the adequacy of the security. The primary criterion is the character of the borrower. Without complete confidence in the borrower, there can be no safety in credit. It is only in those transactions where adequate and unimpeachable collateral is demanded for a loan that attention is diverted from the person of the borrower to the objective security; and it is precisely in proportion as there is doubt about the trust to be reposed in the person of the borrower that corresponding reliance must be put on the objective security. In very few forms of consumers' credit is there any objective collateral to be deposited. In the particular form of consumers' credit known as instalment selling the security consists in a lien or a right to a thing rather than in an article deposited with the creditor. In instalment selling as in all consumers' credit, in consumers' credit as in all credit where definite collateral is not required, the essence of the transaction consists in the confidence reposed in the borrower.

From this point of view we notice in the course of history four distinct types in the utilization of credit. The most obvious, although not always the earliest, may be called that of strictly personal or individual

credit, designed to meet any temporary shortage or any sudden emergency in the ordinary living conditions of the individual. The individual who possesses a number of more durable or permanent articles of consumption may be confronted by a shortage of funds to enable him to satisfy more immediate or pressing wants. He will therefore take a particular durable object to someone who will receive it in safe-keeping and loan a sum of money which represents a portion of its value. In other words, the pawnshop is the simplest and most primitive representative of the institution of credit.

In this form of credit it will be seen that, from the point of view of the lender, the personal situation of the borrower is immaterial. The lender indeed hands over a sum of money and expects to be paid in the future, thus engendering a transaction in credit. The loan, however, is made not on the personal security of the borrower, but on the commodity itself. The commodity reposes in the hands of the lender, not of the borrower; and it must be turned over to the lender before the cash is extended as a loan. It would scarcely be proper, therefore, to call this a loan on collateral. Collateral means something by the side, or additional. A collateral security is security for the performance of a covenant or payment of money given in addition to the principal security. The principal security normally resides in the individual; but in this case the article pawned is the principal security, not the collateral.[1] The only consideration that is pertinent to the issue is whether the pawnbroker, when making the loan, has kept fairly within the actual or prospective value of the commodity. The point of primary importance to

[1] It may be remarked in passing that the ordinary pledge of so-called collateral on money loans in Wall Street really involves a misuse of terms. For the so-called collateral there is really not a collateral security but a principal security; and the character of the individual borrower is more or less immaterial.

the lender is not the need or the character of the borrower but the nature of the article pawned.

It is precisely because the emergency is generally an acute one and because it is so easy to take advantage of the undoubted need of the individual that this form of credit early engaged the attention of the moralist and the legislator. The demand of interest on the loan was reprobated. From the ethical point of view, it was a violation of the principles of charity; and even after it was conceded that a distinction must be drawn between charity and business, it was difficult to find any defense for the charging of interest. The risk involved was small or non-existent, inasmuch as the article pawned was more valuable than the sum lent. It was only very gradually that the lender was able to make good his contention that a simple return of the money borrowed would not recompense him for the time and trouble involved.

Even after the original prohibition of interest had slowly given way before the need of extending credit of this kind, the many abuses of the system led to the continuance of rigid restrictions. The pawnbroker, as the typical money-lender, became an object of contumely and contempt; and in the Middle Ages both the Church and the State vied with each other in an effort to establish model public pawnshops known as the *montes pietatis*. Even today we have our national provident associations and similar organizations which loan money at a comparatively low rate of interest; and the amount which can be charged by the ordinary pawnbroker is almost everywhere rigidly limited. The business carried on by the pawnshop, however, is nowadays recognized as an essentially legitimate occupation. Even though the possible disparity between the conditions of lender and borrower is everywhere recognized, credit of this

kind has slowly fought its way from original prohibition to tolerance and modified freedom.

The second stage of credit emerged when advances of consumption goods were made to the individual during the period that intervened before the ripening of the harvest or the receipt of the earnings.

The most familiar example of this is the agricultural credit which was sometimes found in early communities, even before the pawnshop appeared. In modern times, where conditions are not well developed, this type of agricultural credit still exists. Where indeed we have prosperity, intelligence and foresight; in short, when we have to deal with the high-grade farmer, it is a comparatively simple matter for him to reserve from the annual product enough to maintain him and his family during the interval before the next harvest. Where conditions are for one reason or another less satisfactory, the cultivator will find difficulty in keeping himself and his family during this interval. He will therefore seek advances, whether of food or of clothing, to help tide him over the difficult period during which the results of his work are not yet apparent.

Here again the possibility of abuse is great. The needs of the peasant are urgent. His foresight is slight and he is more or less at the mercy of the unscrupulous and grasping creditor, at first generally some larger landowner, and later some professional money-lender. There is no equality of conditions; and in most cases no actual competition among the lenders. So easy is it for the indebtedness to become a permanent one, and thus to reduce the free peasant to the rank of a serf or a virtual slave, that this class of credit is always regarded with alarm and disfavor in primitive communities. Credit of this kind as applied to industrial conditions is typified by the truck or pluck-me stores that were at one time found in all industrial centers and that

are unfortunately not yet entirely absent in parts of the United States. Here again the payment of money wages is deferred and the individual workman must content himself with receiving in kind his needed articles of daily consumption, with the possibility of all manner of exploitation.

The prohibition of interest in all early agricultural communities is due not only to the fact that the institution of credit was almost uniformly abused, but also to the difficulty of realizing the true economic function of credit. It was only slowly and in proportion as the primitive agricultural life was supplemented by the growth of commerce and trade that the general public began to have an inkling of what the proper use of credit might mean. Even then, however, the original prohibition of all interest was replaced by the distinction between legitimate interest and illegitimate usury; and the so-called usury laws which are still widely applied in agricultural credit have by no means entirely disappeared even in commercial credit. Just as in the case of the primitive or pawnshop credit, which rests upon a pledge of goods, so the more developed system of credit consisting of temporary advances of consumption goods has had to fight its way up from original prohibition through grudging recognition to a more or less modified freedom.

The third stage of credit is found with the development of capital in trade and commerce rather than in agriculture. In proportion as capital came to be used in the creation of commodities apart from the land, opportunity was afforded for loaning to the business man funds which could be utilized not simply to satisfy the personal wants of the individual for purposes of consumption, but also to minister directly to the possibility of augmenting profits. The funds for this increased purchasing power or enlarged control of the

factors of production could, however, no longer be supplied by the country store or the cross-roads usurer. There thus arose the institution of banking. The individual or the company was now recognized as a central agency for the collecting and safe-keeping of the funds of the more thrifty or the more fortunate members of society, and for the business of lending such funds to those engaged in productive enterprises. The banks had at first a difficult road to travel, for the credit in which they dealt could not at the beginning be readily differentiated from the other and much reprobated form of credit. Moreover, the control over comparatively large amounts of capital created an opportunity for all manner of abuses, and not infrequently involved the loss of the depositors' funds. This twofold difficulty—the existence of the old usury laws which prohibited all interest, and the widespread misery which frequently followed the introduction of these new-fangled banks—rendered progress very slow. It was not until the end of the seventeenth century, after more than a century of discussion and opposition, that the Italian device of banking reached England by way of Holland. And it was less than a generation later that the abuses of private and public credit under John Law brought France to the verge of bankruptcy. In the same way, the early part of the nineteenth century was marked in the United States by the most extravagant distrust of banks—a distrust often justified by the sad results of early banking, first in New England, then in the Middle States, and finally in the West.

The early objections to banks are well illustrated in one of the most widely read manuals of economics of about a century ago. Raymond tells us, in his work on Political Economy,[1] that the banks give rise to

[1] Daniel Raymond. *The Elements of Political Economy*, second edition. Baltimore, 1823. Vol. II, p. 143.

all manner of evils. From the many objections that he urges, we shall select only a few. He informs us, for instance, that banks enable money-lenders to obtain usurious interest for their actual money, being enabled to do so by lending their credit and receiving interest for that as well as for their money. "There is no more reason why a man or body of men should be permitted to demand of the public interest for the reputation of being rich than there would be in permitting a man to demand interest for the reputation of being wise or learned or brave." Furthermore, we are told that banks promote extravagant speculation. Raymond even goes so far as to state that "none of the great and substantial operations of industry can be prosecuted by money borrowed at bank interest. No man can reasonably calculate that ordinary profits of commerce will be sufficient to enable him to pay bank interest for his capital and live by his business, and how much less can he expect that the profits of agriculture or manufacture will enable him to pay such interest. Since, therefore, a man who has obtained a loan or discount, as it is called, can never employ that money in agriculture, manufacture, or in regular commerce, he must employ it in some adventurous speculation."[1]

Another objection which Raymond finds in bank credit is that "banks cause sudden fluctuations in the value of property and consequently produce extensive failures." He tells us that "for a whole community to be placed in the hands of a few men who can at pleasure raise and depress the price of property and reduce to bankruptcy those very persons who were induced to engage in speculation by the facilities the banks afforded for borrowing money, is a very hazardous expedient for promoting wealth and prosperity of the community."[2]

[1] *Op. cit.*, Vol. II, p. 146. [2] *Op. cit.*, Vol. II, p. 148.

After the lapse of a century these views appear to us strange, nay, almost puerile; yet they can be duplicated in almost every country in the early stages of bank development.

This early opposition to bank credit gradually disappeared, until today it may be said that the entire business structure is built upon the foundation of credit and that the banks have become the very center of our economic life. The abuses have been lopped off one by one, and nobody any longer doubts the effective contribution of our modern banking machinery to economic life.

The improvements that have gradually been made in bank credit are in large part the result of careful study and protracted experience. With every advance in the complexity of modern industrial life, it has become possible to make a more detailed analysis of the interrelations of the various factors of credit. One has only to read the present-day discussions of the economists and banking experts in order to realize the immense progress in the refinement of theory that has been made since the discussions of a century ago. Problems, the very existence of which was not even recognized at that time, have today emerged into the limelight of ordinary discussion. A similar development has taken place in banking technique, and the successful banker at present must be to a far greater extent than at any past period a man with adequate training and sufficient imagination to comprehend the influence of all the various elements in the problem. Banking today has become not only an art but a science; with the result that our understanding of the scope, the functions, and the limitations of bank credit has reached a point where we can with considerable success distinguish between the use and the abuse of the institution. The result is that the bank, as an instrument of production credit, is now univer-

sally recognized as an integral and necessary part of modern economic machinery.

The fourth type is the utilization of credit in order to facilitate the placing of goods in the hands of the consumer. In one sense, this seems to be a reversion to an anterior stage. There is, however, a marked difference. Consumption credit of the new kind is not attended by the pledge or deposit of a definite article for the purpose of receiving funds to be used to purchase other commodities. In a pawnshop one secures the money to buy a dinner by pledging, let us say, a watch. In the case of modern consumption credit, one does not pledge anything at all; he procures the consumption goods by the simple device of deferring payments. In other words, the characteristic of this form of credit is purchase based upon the pledge of the specific article bought rather than by the pledge or deposit of some different article. With the disappearance of the so-called collateral, the underlying assumption of all credit reappears in its pristine force.

In its most recent manifestation, however, consumption credit has assumed a new form. What we call instalment credit possesses several additional characteristics, which will be analyzed later in detail, but of which two may be mentioned here. In the first place, the deferred obligation is liquidated not in a lump sum, but in fractional and successive payments; in the second place, the goods secured for immediate enjoyment are for the most part durable rather than evanescent. Instalment selling represents the final stage of credit.

This final form of credit is at present only in its infancy. Accordingly, it is still attended with all manner of abuses and the theory itself has not yet been adequately worked out. Our experience of it has been too short and the circumstances attending its effective and proper utilization have not yet been analyzed. If

any inference, however, is to be drawn from the history sketched above, it seems probable that this final form of credit will go through the same phases as its successful predecessors. These phases may be summed up as follows: original unqualified opposition; numerous abuses; considerable doubt as to its propriety; grudging and reluctant recognition of its usefulness in principle; a deeper analysis of its real function and its economic limitations; a more careful statement of its possible extension and applicability; and, finally, an acknowledgment of its unquestioned value as a part of the machinery of modern economic organization. The mere fact, therefore, that consumption credit of the new kind, or instalment buying, provokes criticism and rouses opposition must not surprise us. Every form of credit had the same difficulties to meet at the beginning. It was only as the result of a long experience and of a far more careful analysis that what was sound in each form of credit was gradually differentiated from the unsound. Every phase of economic life has been attended by the emerging of a new form of credit appropriate to its own conditions.

What remains to be done, accordingly, is to approach the problem of instalment selling on its own merits and without either prepossession or prejudices. We must avoid old shibboleths, and refuse on the one hand to be led astray by the magic of the word credit, or on the other hand to lift our eyebrows or to shrug our shoulders because of the idea that in some way so-called consumption credit is unsound as compared to production credit. What is needed, in other words, is an independent, impartial and unbiased study of the phenomenon as it presents itself in modern life, and an attempt to distinguish between the undoubted possible abuses of the system and the conditions and effects of its legitimate use.

CHAPTER VII

THE NATURE OF CONSUMPTION CREDIT

1. What is Capital?

The application of instalment selling to automobiles and similar commodities is generally discussed on the basis of the distinction between production credit and consumption credit. As these commodities are ordinarily classed among articles of consumption, the selling of them upon the instalment plan is frowned upon by all those who consider the application of the method to consumption goods a misuse of the institution of credit.

In order to test the validity of this contention, we must revert to certain points in the recent development of economic thought.

A distinction that was formerly much observed was that between capital and other forms of wealth. The goods, wares and commodities that are supposed to constitute wealth were divided into two classes—those reserved for immediate consumption, like food, clothing, furniture and jewelry; and those utilized for further production, such as raw materials, ships and railways, factories and plants. Inasmuch as the root idea was that the latter forms of wealth would be so used as to afford a money income, they were generally held to include stocks of all kinds, or commodities ready for sale. To this entire class there was applied the term "capital." All wealth was therefore divided in two parts, capital and consumable wealth, capital being deemed roughly to comprise all wealth devoted to production.

This nomenclature, although still frequently found in the business world, was soon criticized as inadequate. For, from another point of view, it was realized that the proper distinction ought to be not between capital and consumable goods, as representing distinct classes of commodities or wealth, but between capital and income as representing different methods of measuring wealth. The value of all commodities depends at bottom upon the utilities which they confer, that is, upon the services which they render in satisfying our wants; and if their supply is so limited that we must economize in their use, i.e., if they cost something to acquire or to produce, they will have a value. If we measure this value in terms of the periodical services that they perform, we speak of the income. We can enjoy this periodical income ourselves, or we can let a third party enjoy it. In that case we rent out the commodity and speak of its rental value. The income is in money, not in actual service or money's worth. Thus we rent an automobile at so much per day, or a house at so much per month or per year; and the owner of the automobile or the house secures a money income from the rental of the commodity, rather than a direct income in the shape of enjoyment of its services.

If, however, we prefer to buy outright rather than to rent, we pay a price which represents the capital value of the commodity. This capital value is nothing but the summation of the present value of a series of anticipated future incomes. Assuming a given income, the more protracted the future services, the greater will be the capital value in relation to the income value. Under present conditions, the capital value of land is equal to about twenty-two or twenty-three years' purchase, as it is called; while the capital value of an automobile is, for obvious reasons, far less in relation to income value.

This method of regarding capital as a summation of

incomes applies to all wealth. The recognition of income as the fundamental economic concept, implying a flow of satisfactions, and of capital or capitalized income as constituting merely another criterion of wealth in general, destroyed the validity of the old distinction between capital, as representing certain kinds of wealth, and non-capital, as representing other goods or commodities. Capital in the more modern acceptation of the term would therefore include all forms of wealth considered as constituting a fund from which income is derived. In order to maintain the core of the old distinction then, it would be necessary to divide capital into two classes, and to speak of production capital or producers' capital, as over against consumption capital or consumers' capital. Although this is frequently found, the term is very awkward. It has accordingly become customary with many modern economists to speak in a more general way of producers' goods as over against consumers' goods. Producers' goods—sometimes, but less aptly, called instrumental goods—would then be those forms of wealth utilized for purposes of production; while consumers' goods would mean commodities used for purposes of consumption. Thus we are back again to the original attempt to distinguish between production and consumption.

In order, however, to test the validity of this distinction and to decide into which category to put an automobile or the other commodities to which instalment sales are applied, it is necessary to analyze more closely the concepts of production and consumption. Let us begin with the idea of production.

2. The Nature of Production

Production, from either the individual or the social point of view, may mean one of three different things. In the first place, it may mean the creation of wealth

in the sense of bringing into existence something new. To produce in this sense is to create. Producers' goods would then be those forms of wealth reserved for the purpose of increasing the stock of commodities. This concept of production might be termed the physical concept. Adam Smith, who was chiefly responsible for this, defined productive labor as the labor which embodies itself in some tangible, physical commodity. All other labor is unproductive.

With the development of business life, this concept soon merged into a second one. Production came to mean the act which results in the securing of money gains, or pecuniary profits. A productive activity would then be one which increases the individual's wealth in the ordinary acceptance of the term. When we speak of a business or enterprise as productive, we commonly mean that there is a surplus of money income over money outlay. The second concept of production may, therefore, be characterized as the pecuniary concept.

Production in the pecuniary sense of the attainment of a money surplus is not necessarily the same as production in the sense of creation of more goods. Ordinarily, indeed, there would be little difference; for profits are, as a rule, obtained by giving to the consumer more of what he really wants—that is, a larger quantity of cheaper or better goods or commodities. Where fair competitive practices are observed, this is the quickest way of capturing the market and of serving the public. The production of wealth for the individual then goes hand in hand with the production of wealth for the community.

The point to be emphasized, however, is that this is not necessarily true in all cases. We do not, of course, refer to the fact that the individual may earn profits without actually increasing the quantity of commodities.

For what is of importance is not quantities, but values. There may be an increase of values, through augmenting quality rather than quantity. There must, indeed, always be an increase in the quantity of the utilities afforded by the goods. But an increase in the quantity of utilities does not necessarily mean an increase in the quantity of goods. More utilities may be imbedded in the same number of goods. Even though an individual may have a productive business or make money without increasing the quantity of output, there would still, in the above case, be an increase in wealth.

What we have in mind, however, is that production in the pecuniary sense of addition to gains is not necessarily production in the sense of creation of wealth. The speculator may, in certain circumstances, increase his profits at the expense of another individual; in which case it will happen that what one gains the other loses. The burglar adds to his wealth, while the victim suffers. In both cases there may be an increase of accumulation for the individual without the creation of more wealth. But, furthermore, there may even be direct opposition between an addition to wealth of the individual and an increase in the stock of commodities. The monopolist may increase his profits by restricting the output.

It may be objected that we are here confusing individual and social considerations. We ought not, so it might be said, to speak in the above cases of creation of a money surplus as production. For, while there may be a surplus to the individual, there is no surplus to the community and, therefore, no social surplus. The objection is, however, invalid because the same argument that is here applied to individual production may be applied to social production. For instance, a government, representing the community, may decide to increase the money value of some product over which

it has control and which is in demand by foreigners, either by manipulating the market conditions or by restricting the output. In the first case, the money profits or the government income will not be attended by any increase of tangible material wealth; in the second case the increase of money profits is accompanied by an actual decrease of money wealth. An example of the first case is afforded by the recent experiments of Brazil in connection with the valorization of coffee. An example of the second case is afforded by the practice of Holland several centuries ago in destroying a part of the supply of spices in Celebes and other East India islands in order to raise the price.

The above examples would, of course, not apply to social production if the production and consumption took place entirely within the community. Nor would the situation apply to the world economy as a whole. But where production is measured in terms of money returns or profits, which depend upon reciprocal relations with others, the distinction holds good not only of individuals exchanging with each other, but also of communities.

The same contrast between money income and the creation of tangible goods is possible when we compare production in the present with production in the future. An individual may increase his money income at present by drawing upon his capital resources and thereby depleting his future income. In like manner a community may increase the present output by turning out commodities that will ultimately be destructive of wealth, like cannon or burglars' tools. Or, again, a community may accumulate a surplus of pecuniary profits by producing at the cost of destroying some of the producers, as, for instance, by employing children of tender age, or utilizing laborers in poisonous trades without protection, or so managing the working force

as to lower the standard of life and thus to decrease the *efficiency of production in the future. In all such cases,* the present surplus of wealth is secured at the cost of a future diminution of wealth. Thus, from the narrow point of view of the present individual or the present community alike, an enterprise may be productive in the pecuniary sense without being productive in the other or more appropriate economic sense.

While both the physical and the pecuniary concepts of production were widely held, a change was brought about by the criticism of Adam Smith's concept of productive labor. A more careful analysis disclosed the fact that satisfactions are afforded not so much by the physical, tangible objects, as by the services which they confer. As soon, however, as we reach the idea of services, we must consider also the services afforded by human beings. Productive labor was, therefore, so broadened as to identify production with the creation of services rather than of tangible, physical commodities. When this point was reached, we attained a more profound concept of production.

In this third sense production really means the creation of a surplus of utilities over costs, of results over sacrifices. Production in this deeper aspect is something subjective, which then ordinarily transforms itself into something objective. Man can create nothing material; he can only impart motion to particles of matter and so arrange them that in their new form they may gratify some desire. The criterion of production is in this sense the creation of a new utility. When an activity brings about an addition to the existing form of utilities, we have an act of production. The real income, both of the individual and of the community, is in this sense not money income, but psychic income. True income is service income; true production is the production of utilities.

In actual life, indeed, where we have to deal not only with services of individuals, but with the services embodied in tangible, physical goods and commodities, this addition to the stock of utilities is commonly reflected in the commodities themselves and in the gains which we secure from these commodities. Production, therefore, in the sense either of an actual creation of wealth or of the procurement of money income, really constitutes a more or less imperfect measure of the true income, which consists in the surplus of utilities over costs. In business it is, therefore, quite legitimate to speak of production as involving profits or money income; and in the usual, everyday life of the community, it is also legitimate to define production in terms of the more numerous or better tangible commodities that constitute wealth. In reality, however, each of these concepts constitutes only an imperfect realization of the real meaning of production. Economics deals, indeed, with wealth; but it treats primarily of man.

From this more fundamental and subjective point of view, production may also be considered in its immaterial as well as its material aspects. What individuals want, after all, is not simply to live, but to live well. The more civilized the community, the greater will be the production of material things in order to satisfy the more immaterial and spiritual aims of life. The greater the accumulation of wealth of the individual, the more time will he have to devote not only to recreation and to leisure, but to art and music, to literature, and even to contemplation and to philosophy. Wealth is indeed often utilized for precisely the opposite ends —those of self-indulgence, of insensate or harmful luxury, or of vice. The point that we are seeking to make here is that, with the individual and the community alike, the mere multiplication of material commodities or the mere heaping-up of a surplus does not in itself

tend to the complete satisfaction of the finer wants that are developed by civilization. The advance of humanity depends at bottom upon a progressive refinement of wants, that is, upon the growth of welfare in its highest aspects.

It must not be overlooked, however, that the production of welfare is closely related to the production of material wealth. Even though plain living and high thinking are the mark of the true philosopher, the ordinary man and the customary society will not be able to develop the higher life except on the foundation of material wealth. A poor community is not apt to be a fine community; a half-starved individual is not likely to be attracted to the more immaterial ends of life. On the other hand, the larger the opportunities for the satisfaction of the more immaterial wants, the greater is apt to be the reaction upon the individual and the greater is likely to be his productive efficiency in the future.

Thus material wealth and immaterial wealth are closely intertwined. An individual or a community that is compelled to devote all its energies to the creation of the bare necessaries is productive only in a minor sense. The greater efficiency which comes from the all-around satisfaction of human wants leads to the increase in the production which is of real importance to society. This is the true surplus which lies at the root of the idea of progress.

Production then does not simply mean the creation of an increased stock of commodities, or the yield of enhanced profits to the individual. A particular commodity or a particular activity is productive also—and especially—if it helps not only to engender productive forces for the future, but also to develop in human beings those habits of life which further the growth of more varied and finer wants, and which promote the

possibility of an adequate, an effective, and a continually less costly satisfaction of these wants.

Of the three senses of production, therefore, the one of true significance in social economics is that creation and accumulation of material goods which will at the same time permit of, and be associated with, the development of that immaterial wealth which we call social welfare. Real production is the creation of wealth and of the productive efficiency which renders future wealth more easy of attainment. Welfare, progress, happiness, civilization, are all intimately bound up with, and conditioned by, the increase of production. Any scheme of life, any plan of economic or social organization which thwarts or impedes or lessens this kind of production constitutes a retrograde step. Any new activity or commodity or social arrangement which increases or facilitates or cheapens this kind of production constitutes a step forward in the onward march of humanity.

If production, then, is to be considered not simply from the point of view of the growth of money receipts or gains, or from that of the present increase of material commodities, but rather from the point of view of the advance of the immaterial wealth or the economic welfare of the producer, in the largest sense of the term, it becomes of importance to consider what the individual or society does with the wealth that is produced. We come, in other words, to the idea of the consumption of wealth as over against the production of wealth.

3. The Nature of Consumption

It is generally thought that just as production means the creation of wealth, so consumption denotes the destruction of wealth. As we pointed out above, however, these ideas cannot apply to material things. Precisely as man can create nothing material, so he can

destroy nothing material. Matter is indestructible. He can only so rearrange the position of the particles as to put an end to their utility in that particular form. What we do in consumption is to destroy not matter, but the successive utilities of matter.

Strictly speaking, the term "consumption" is not entirely clear or satisfactory. What we really want to do with the utilities that constitute the satisfaction of our wants is to enjoy them, that is, to use them. But we can use something without of necessity completely destroying it. What is here involved is the distinction between using a thing and using up a thing. Using up is equivalent to final destruction. If we use a suit of clothes from day to day, we utilize it; we do not completely destroy it. We consume each day certain utilities afforded by the clothes; and it is only at the end of the period, when the suit is worn out or used up, that we can speak of its final or complete destruction. When we utilize a commodity, what we destroy is only the evanescent utility that is afforded at that particular instant of time. We destroy a particular utility; we do not destroy the commodity, which embodies a whole series or bundle of utilities. Consumption, therefore, from this point of view may mean either partial or total destruction.

When we regard it from this angle, however, it will be recognized that both production and consumption are parts of a larger whole, namely, utilization. In consumption, indeed, we ordinarily measure the utilization of the services afforded by commodities for the satisfaction of the personal wants of the individual; while production is generally conceived of as the utilization of commodities designed, as we have seen, either to provide a money income or to furnish an addition to the stock of commodities. Putting the contrast in the more usual way, we think of production in terms of money income

or tangible commodities; we think of consumption in terms of psychic income, or the satisfaction of wants.

In the broader sense, however, as we have seen, there is really little difference between these two processes. For each deals with the relation of man to the outer world, and each involves a surplus of utilities over costs. If a man shovels coal into the boiler of a locomotive and thereby creates steam utilized in transportation, we speak of it as an act of production. If a man shovels coal into his own furnace in order to produce the heat which he enjoys in his apartment, we call it an act of consumption. In reality, there is little difference between these two activities. The steam in the locomotive is ultimately used to create new material goods, or, at all events, to increase the values of existing goods; but who can tell what end may be subserved by the additional heat in the apartment of the individual? This additional warmth may contribute to all sorts of ends, ranging from the mere lazy gratification of the desire for comfort, to the most energetic activity in accomplishing something that is worth while for the community. We produce, indeed, in order to consume; we do not consume in order to produce; but if there is to be any real progress in society, we must consume in such a way that there will be a resulting surplus of utilities over costs for the community as a whole.

The utilization of wealth that we call production is, therefore, from one point of view not to be distinguished from the utilization of wealth that we call consumption. Wealth may be utilized in four different ways. It may be utilized so as to increase the surplus of utilities over costs; so as to maintain this surplus; so as to cut down or diminish this surplus; or, finally, so as to engender a deficit instead of a surplus.

These various modes of utilization apply to both production and consumption. In the case of production,

the activity may, in the first place, add to the existing stock of commodities or to the money income of the individual. The activity may, in the second place, involve no substantial change, and result in neither profit nor loss. The activity may, in the third place, turn out commodities, but in a wasteful way so as to reduce the customary profits; and the waste may go to the point where the net result may even approach zero. Finally, the activity may result in a deficit instead of a surplus, or a loss instead of a gain.

What is true of production is equally true of consumption. In a certain sense indeed, consumption always involves a surplus of satisfactions over wants; that is to say, a man will not consume anything unless he really wants to do so, or, in other words, unless he thinks that he is getting some satisfaction. But from the true economic point of view, namely that of society, progress depends upon the nature of the individual want and the kind of satisfaction. If the want is a socially desirable one, then its satisfaction conduces to progress; if it is a socially undesirable want, it conduces to decay. The habitual drunkard satisfies his craving for drink; but to the extent that he is ruining himself, he is lowering his value to society. The surplus of real economic importance is the surplus conducive to social progress.

This true surplus is to be envisaged from the point of view of creative capacity or of finer living. The surplus which is of true importance in economics is that surplus which makes the individual a better member of the group and which contributes to the better existence of society as a whole. If the surplus is envisaged in this way, we may say that commodities can be consumed in four different ways; first, so as to increase the surplus; secondly, so as to maintain the surplus; thirdly, so as to diminish the surplus; or, fourthly, so as to result in a deficit.

The simplest example of the first class is that of the consumption of food. The food may be consumed by the child in order to build up the bone and sinew which will serve him as a man. When a balance is struck, it will be found that there is more wealth than before. What has been consumed has more than reproduced itself in values or in quantities.

In the second category might be put the food that is consumed by an adult in order to maintain him in his customary health and working powers: it does not increase, but it maintains, his productive power. It produces energy indeed, and contributes in this sense to the productive process. But when the balance is struck, the amount consumed is equal to the amount produced. There is, in other words, no surplus.

In the third category we would put the unnecessary consumption of foods by the individual, unfortunately a common practice. It involves a waste, i.e., a reduction of the surplus.

Finally, the fourth category is represented by the injurious or poisonous or excessive food consumption which interferes with, or depletes, the productive powers of the individual, and which accordingly means a deficit instead of a surplus; a decrease, not an increase, of production.

If we attempt to characterize these four categories in economic terms, it would be proper to speak of the first class as positive or creative consumption; of the second class as neutral consumption; of the third class as wasteful consumption; and of the fourth class as destructive consumption.

The economists had an inkling of this when they drew the distinction between productive and unproductive consumption. The distinction, however, is no longer tenable in the old way. They used the term "unproductive" in the sense of non-productive: pro-

ductive was something positive, unproductive was something negative. Most writers, however, who employed the term "unproductive" used it in the sense of destruction of wealth. The activity is not merely a negative activity, but a very positive activity; only that it results in a minus instead of a plus quantity. Unproductive consumption, accordingly, is generally thought of as a consumption that is anti-economic because it results in a destruction of wealth.

How far is this conclusion legitimate?

4. Productive and Unproductive Consumption

In the history of economic thought, it is always wise to interpret the ideas of the leading thinkers in the light of the particular environment. The distinction between productive and unproductive consumption as elaborated by the classical economists is to be regarded from this point of view.

They looked at the subject from the standpoint of the business man. Conceiving of production as the securing of money gains, they considered only those individuals to be productive who were connected with a business organization as owners or employees. To them production stood for working in a business enterprise as opposed to consumption, which consisted in the enjoyment of the fruits of this work. This is the reason why such border-line cases as domestic and personal service aroused so much discussion. That type of occupation was felt to be unproductive and yet at the same time it was motivated by the desire to secure money gains. On the other hand, as we have pointed out above, an entrepreneur suffering losses in his business, which was thus not yielding any money gains, would scarcely have been classed as unproductive, the definition notwithstanding.

In order to be fair, however, to the earlier economists,

among whom there were thinkers of the very first rank, it is necessary to point out that what they really had in mind by the concept of production was the bringing into existence of tangible, non-perishable goods susceptible of accumulation. Production meant to them the creation of new wealth; consumption, the destruction of this wealth.

What the economists really meant was that it injured social welfare to divert savings from embodiment in material goods capable of accumulation and helpful in increasing future production to embodiment in ephemeral, intangible goods, not susceptible of accumulation and, therefore, of no importance for the future.

In the beginning of the nineteenth century, when the economists formulated their conclusions, there was much to be said for this doctrine. As a consequence of the revolution in the technique of production that was rapidly spreading from one industry to another, there was indeed an urgent need to enhance the capital of the community. But what was true then is not true now. The material basis of our machine civilization, built up by the energy of the past generation, is largely completed. Savings for the maintenance and expansion of our industrial machinery are now provided, to a much larger extent than before, by business enterprises in the course of their daily operations. So far as industry is concerned, the rôle of individual savings is not the same. It is familiar that, in the United States for instance, most of the savings are afforded by the activities of the business corporations. On the other hand, the mechanical civilization, under the conditions of which we have been living for a century or more, is providing us with an enormous surplus of material goods. It is no longer necessary for the individual to skimp and to save, to look with apprehension to the future, and to endeavor at all costs to make provision for the days to come. At

the present time many question the truth of the widely accepted maxims of former days which inculcated the need of saving in order to increase production, which again would lead to increased savings, and so forth, in an endless chain.

In a certain sense, indeed, the old distinction between production and consumption is still valid. Production and consumption both imply human activities in relation to wealth, and each is a part of the larger economic process which involves the flow of goods. But in this cycle of economic activity we stop at a given point. At one point, we think only of the activity itself; at another we think of the results of the activity. In the case of consumption, we fasten our gaze on something that is being used or used up; in the case of production, we direct our attention primarily to the results of the activity. When we speak of the coal that is being used up, we can approach the phenomenon from two angles. If we consider it as being actually burnt up in the furnace, we call it an act of consumption. If we think of it primarily from the point of view of the results of the act, as in the case of the coal in the locomotive boiler, we call it an act of production. What happens as a result of putting the coal into the furnace we do not think of further than the affording of warmth to the individual; what happens as a result of putting the coal into the locomotive boiler is of the utmost consequence in the creation of new services and, ultimately, of an addition to the stock of commodities. In the case of consumption, we limit ourselves to the psychic factor; in the case of production, we think of the addition to wealth.

While this distinction between production and consumption is in a sense legitimate, and responds to the almost instinctive usage of mankind, it is not wholly satisfactory; and it leads, in some respects at least, to

dubious conclusions. This is especially true of the old distinction between productive and unproductive consumption, the weakness of which emerges when we no longer think of the act of utilization itself, but attempt to estimate its consequences. Productive consumption, indeed, remains that kind of consumption or utilization which results in something new. Productive consumption is creative consumption. But production in the deeper sense, as we have seen, cannot be limited to either the addition of actual commodities, or the making of money. The real productive surplus is a surplus of utilities over costs.

Furthermore, the other results of consumption cannot be subsumed under the term unproductive consumption. Where an act of consumption exerts no effect on production, it ought to be called not unproductive, but neutral consumption. It is neither productive nor unproductive, in the sense that productive activity implies a surplus and unproductive activity a deficit. Finally, as we have seen, an act of consumption may result in either a relative or a positive diminution of the surplus. In other words, from the point of view of its effects, consumption may be either wasteful or destructive consumption.

Thus the proper distinction is not the old one between productive and unproductive consumption, but the more refined classification into creative, neutral, wasteful and destructive consumption.

It is true that wasteful consumption might in a sense be declared to be productive, on the ground that despite the waste it nevertheless turns out goods. But in the true sense—namely, that of creating an addition to wealth proportionate to the normal efforts employed—the activity is really not productive. There is always the danger that the amount of wealth dissipated in the process may actually surpass the amount of wealth

which results. In proportion as the waste increases, the relative productivity of the utilization becomes an actual loss. Wasteful consumption may therefore justly be declared to be relatively unproductive consumption. Finally, in the last category—destructive consumption—there is not only a decrease of wealth at present; but, owing to the falling-off in productive efficiency, progressively less wealth in the future. If wasteful utilization means a relative decline in prosperity, destructive utilization spells not only decay but disaster.

This distinction is significant chiefly for the reason that in considering productive consumption as conducive to the creation of economic welfare we are taking as a criterion not so much the action as the reaction. The important point about the consumption of commodities is, from this point of view, not merely what we do with them, but what they do with us. There is a profound truth in Ruskin's statement: "nor can any noble thing be wealth except to a noble person." In other words, there are two senses in which we should understand poverty: we are poor if we have not enough money to satisfy our wants; but we are also poor if we have not enough wants to induce us to live a civilized life. For in such a case we shall have not plain living and high thinking, but plain living and equally low thinking. The real aim of all economic activity is not only to make wealth cheap, but also to make man dear. In other words, economic and, in the end, moral progress depends on rendering the individual both desirous and capable of ever enlarging the range of his consumption, with a corresponding decrease in the sacrifices necessary to procure it.

The real secret of life is thus to be sought in the positive utilization of wealth, as in the positive utilization of all our opportunities.

It will readily be observed that just as we cannot

draw a sharp line of distinction between producers' goods and consumers' goods—for the same article may be found now in the hands of the producer and now in the possession of the consumer—so we cannot distinguish between definite classes of consumers' goods according to the above criterion. In other words, just as the same commodity may be now a producer's good and now a consumer's good, so the same commodity may be used in turn creatively, neutrally, wastefully or destructively.

If, nevertheless, it is deemed important for general purposes to put a particular commodity into one of the four classes, it would be necessary to compare the respective importance of the various actual modes of utilization and then to strike a balance. In the case of the consumption of opium, for instance, while it is undoubtedly beneficial in many cases for medicinal purposes, there is but little doubt that the overwhelming character of the consumption would put opium into the last category and that on the whole, therefore, it would have to be declared to be a commodity of destructive consumption. In almost every other case, however, before we can decide whether to put the particular commodity into any one of the categories, a distinction would have to be drawn between its use and its abuse.

The fact that a raw material is sometimes wasted will not deprive it of its normal characteristic of productive utilization. The fact that a railway kills more individuals than an ordinary horse-drawn coach will not militate against its claim of satisfying the requirements in general of productive utilization. Almost everything can be used either beneficially and innocently; or, on the other hand, wastefully or destructively. In order to put any commodity into a definite class, we must ascertain the relative importance of the various degrees of utilization.

Our conclusion is therefore clear. The distinction between production and consumption is tenable in the sense that production looks to wealth, while consumption looks to man. Putting it in another way, production looks to the creation of wealth as such, while consumption looks to the absorption of wealth on the part of the individual. In consumption, we think of the act of utilization; in production, of the results of the act. Yet, in the broadest economic sense, the distinction between production and consumption is less sharp than ordinarily conceived, because of the uncertainty of the result. The consequences of utilization are frequently unpredictable. Each of the two activities—production and consumption—constitutes a method of the utilization of wealth, and each may result in some positive surplus of utilities over costs. We produce in order to get a surplus of wealth, which we translate into terms of objects or of money. We consume in order to get a surplus of pleasurable sensations; we think only of the utilization of the economic good or of the service. The utilization, however, may have very different results upon the accumulation of wealth: according as it exerts these different influences, we should call it a creative, a neutral, a wasteful or a destructive consumption.

The inference to be drawn is that there is no longer any foundation for the opposition so often voiced against consumption credit, based on the idea that it represents something destructive, as over against production credit, which represents something creative. Consumption credit is in itself quite as legitimate as production credit. The legitimacy depends not upon the distinction between production and consumption, but on the kind of utilization. Where there is a positive, or even a neutral, utilization, credit is legitimate. Where there is a wasteful or a destructive utilization, credit is illegitimate. But

both of these considerations apply quite as much to production credit as to consumption credit. The practical difference between the two is that when the ordinary process of production results in a loss instead of a gain, the producer will stop borrowing or the lender will refuse further loans. On the other hand, since the consumer through the very process of consumption always procures a satisfaction of his wants, he will not automatically stop borrowing even for wasteful or destructive consumption. The inference from this is, however, only the need of some social control over credit for wasteful or destructive consumption; it has no application to the credit advanced for creative or neutral consumption. Consumption credit as such is quite as legitimate as production credit.

We come finally to the last objection that is urged against consumption credit by those who think of production in terms of the securing of money gains or, more broadly, as business pursuits. This objection involves the idea that consumption credit is illicit because it does not result in the increase of any money income to the borrower and that, therefore, the credit now granted does not of itself create the means of repayment in the future, as is the case in ordinary business.

The answer to this contention, however, is that a smooth working of the mechanism is just as important for the repayment of a business loan as it is for the repayment of a loan to the consumer. The putative strength of the objection resides not in the fact that the business man has to make no effort to repay the loan, while the consumer makes such efforts; but in the fact that the entrepreneur makes these efforts in the course of his everyday business, while for the consumer such an effort would be something unusual and not hitherto attempted. This contention is, however, really invalid, since saving a portion of one's income is just as much a

regular part of the activity of the rational consumer as are the series of transactions entered into by a business man in order to enable him to pay his loans when they become due. The real point at issue is that of the rationality of the ordinary consumer, a point that will be considered in full hereafter (Chapter XII, sec. 4). Our conclusion, as we shall see, is that the ordinary contention cannot be substantiated.

The general result of this analysis, therefore, is that the economic nature of instalment credit must be considered in the light of the doctrine of utilization. To object to instalment selling on the ground that it is consumption credit with the further implication that consumption credit is in some way or other less legitimate than production credit is essentially invalid. It rests upon a woeful poverty of economic analysis.

CHAPTER VIII

SOME GENERAL TENDENCIES OF CONSUMPTION CREDIT

1. The Problem

Instalment credit, as we have seen, is a more or less recent development of consumption credit. What is of interest here is to trace, if possible, the influence which has been exerted by this new form of credit upon the total amount of consumption credit.

Has the system of instalment selling increased the volume of credit or has it simply changed the forms in which the credit is granted? If any assistance could be obtained from an inductive study of the situation, it would be necessary to seek answers to the two following questions: (1) What, if any, is the change in the amount of credit sales relative to total sales? (2) What, if any, is the change in the length of time for which the credit, once granted, remains outstanding?

It was in the hope of answering these questions that a rather elaborate statistical study was undertaken. It will be seen that in stating the above problems we have been careful to put them in a form which would render them susceptible of a statistical analysis and of a quantitative measurement. While the statistical material that we were able to secure was not of such a nature as to permit absolute and clear-cut answers to the above questions, a number of conclusions may be drawn as to the general tendencies observable in consumers' credit.

While the reader may be referred to the analysis itself, which we have called the consumers' study, and which is printed in Appendix Three, it may be of interest to

call attention to the manner in which the problem was attacked.

The industries selected were clothing, furniture, jewelry and hardware. Taking a large number of retail stores in each line, we were able to secure their balance sheets, sometimes supplemented by an estimate of sales of the past year. These facts were filed, in the form of financial statements, with various organizations in order to obtain a definite credit rating, which would presumably be utilized by the wholesaler in extending credit to the retailers. The only indication of the credit granted to consumers in such statements consists of the accounts and notes receivable, which represent the uncollected payments due at the time when the books were closed. The sums left on the books represent a resultant of two factors: the total amount of credit granted and the average length of the credit period. Had it been possible to expand the influence of each one of these factors separately, it would have been comparatively easy to secure with respect to these particular concerns an exact answer to the questions which we propounded above. The minor factors which affect the amount of receivables may be declared to be, on the one hand, the accounting practice in writing off bad debts and, on the other hand, the collection policy.

It is clear that the absolute amount of accounts and notes receivable does not in itself yield much valuable information. It must be related to the volume of business done in order to admit of a comparison of stores of different sizes, and years of varying business conditions. It is usual to take the sales during the year for which the balance sheet is prepared as the base from which to measure the receivables. While there is much to be said for this, it must be observed that, from the point of view of strict logic, the two figures are incommen-

surable. The sales are the result of an accumulative process throughout the year; the receivables are a result of two diametrically opposed processes—addition and subtraction. If economic conditions change, sales reflect the circumstances throughout the whole year, while receivables are influenced to a much greater extent by the actual conditions at the close of the year or by the prospective conditions for the next year. Moreover, receivables represent the exact credit entry at the time of closing the accounts, while, in many cases, sales represent an estimate. Nevertheless, the ratio of receivables to sales is serviceable as giving a basis for an estimate of the average length of time that the ordinary consumer—whether he buys for cash or on credit—uses the goods before paying for them. It may be remarked parenthetically that were it possible to secure similar figures for all of the items which constitute the budget of the typical consumer, we should have been able to answer one of the important questions with which we shall have to deal later, namely, the degree in which the average consumer's purchases on credit anticipate his future income.

A clear logical affinity exists between receivables and total current assets. The former are contained in the latter as a part in the whole. Both are equally exact and each reflects the conditions that were present for the same period of time. As an index of the size of a business, however, assets are not so good as sales, inasmuch as the enterprise is concerned primarily in making sales and accumulates assets only as an instrumentality to render sales possible. The realistic meaning of the ratio of receivables to total current assets is concerned with the part of the dealer's inventory which is in the hands of his customers, rather than under his own immediate command.

Finally, the receivables may be related to the current business worth, i.e., to the difference between current business assets and current liabilities. This is probably the most stable of all the three bases mentioned, inasmuch as it is affected only by new investments or by the withdrawal of capital on a large scale or by considerable business successes or reverses. As a consequence, this ratio ought to reflect more closely than either of the others the fluctuations of receivables from year to year. This ratio is an index of the proportion of the liquid resources of the business that are used in rendering the customer a service; and is distinct from that of the mere transportation or the breaking-up of the goods into smaller units. From a more narrow viewpoint, this ratio may be said to indicate the degree of business liquidity.

In studying the fluctuations of these ratios from year to year, the stores were classified in several different ways. The criteria for these distinctions were found in geographic location, in the population of the town or city, in the size of the stores, and in the characteristics of stores of given size arranged in cities of a given magnitude. The industries selected were chosen for the reason that in them credit had been extended before instalment selling became widespread. Conditions were accordingly such as to make the instalment arrangement acceptable to both the buyers and the sellers. With the exception of the jewelry trade, where the figures run back to the year 1897, it was practicable to secure data for the other industries only from the year 1921; but even then the results disclosed some interesting tendencies. The question as to the technical methods employed in this statistical inquiry is relegated to the Appendix. We limit ourselves here to a recital of the particular and general conclusions.

2. Clothing and Furniture

Taking up the clothing business, the first conclusion, which verifies the common understanding of the situation, is that the volume of credit outstanding is higher in times of prosperity and lower in years of depression. Substantial differences in the volume of outstanding credit, however, were found to exist among the different states. The highest ratio is seen in the South, while the lowest percentage is found in the far West. These differences among the states were most marked in times of depression, that is, in 1921 and 1922; and diminished in relative importance during the subsequent years. In other words, the credit situation has become more uniform with the lapse of time. It is, however, unfortunately not possible to conclude whether this growing uniformity is due to cyclical factors, in the sense of a greater uniformity in times of prosperity, or whether it is due to a tendency for the practices themselves in the clothing industry to become uniform. It is, none the less, worthy of note that this tendency to uniformity was parallel to the increase in the total amount of credit which has taken place in the retail clothing business during the past few years.

So far as concerns this increase in the total volume of credit, it may be pointed out that a comparison with the figures contained in an earlier report by Professor Secrist[1] seems to show that although the volume of credit increased from 1921 to 1925, there was virtually no increase as between 1914 and 1924. The growth from 1921 to 1925 may therefore be considered as due to a change in business conditions and corroborates the above conclusion that credit in clothing establishments tends to increase as a result of prosperity.

[1] Horace Secrist. *Costs, Merchandising Practices, Advertising and Sales in the Retail Distribution of Clothing*. 1921. This studies the situation in 1914, 1918, and 1919.

Another point of interest to students of the business cycle is that we find a greater shifting in the ranks (based upon the magnitude of the ratio of receivables to sales or to assets) of the various states in times of depression than in periods of prosperity. This is significant because it indicates that the credit situation is a result of industrial and commercial factors which do not respond in the same way in every state. In other words, a change in the industrial situation does not manifest itself in the same manner or to the same degree in every place.

In the next place, when we consider the credit situation according to the size of the locality, we see that the largest percentage of credit is extended in the more populous cities and in the small towns with a population under 2,500. The greater ratios in the small towns may be explained on the ground that in such places the stores usually serve an agricultural population where a long-time credit is ascribable not only to the seasonal nature of the farmer's income, but also to his personal acquaintance with the retailer. The movement of the ratios of accounts outstanding in these smaller towns has been found to correspond closely with the fortunes of the farmer—the credit increasing with agricultural prosperity and decreasing with adversity. In the other towns, the fluctuations and the ratios are closely correlated with the general business conditions.

Coming next to the variations in credit practices among stores of different sizes, we find that larger stores extend on the whole a greater percentage of credit than do the smaller stores. At the same time, there is an apparent correlation between the credit of a store of a certain size and the city in which it is located. The small store has the greater ratio in the small towns, and the large store has the greater ratio in the large towns. If the data for each group of stores, arranged according

to size of establishment, are examined for year-to-year movements, a distinction is observable between the movements in the small and in the large stores. In the small stores the amount of credit has declined perceptibly from 1914 to 1921. The same movement is also visible in the more intensive material from 1921 to 1925. On the other hand, the amount of credit extended by the large stores has increased for both periods. The increase in the period from 1921 to 1925 is perhaps due to the fact that they were more careful of their extensions during the bad years of 1921 and 1922 than they were later, that they did not yield to pressure to lower their credit requirements, and that they are taking advantage of the present era of prosperity to grant more liberal credits.

If we consider in the next place the furniture business, we notice some interesting resemblances and some well-defined contrasts, as compared with the clothing industry. The same differences between sections are observable: the highest ratio is found to exist in the South, and the lowest in the Far West. Even the specific examination of the year-to-year movement leaves these two sections in the same relative order. This strengthens the conclusion that credit practices depend fundamentally on the particular economic situation.

An important distinction, however, between the furniture business and the clothing business is found in the fact that in the former the importance of sectional differences does not diminish from 1921 to 1925. In other words, there was as much difference between sections of the country in 1925 as there was in 1921. One explanation is that the greater stability in the furniture business is due to the fact that the business cycle exerts a different influence in the case of furniture from that which it exerts in the case of clothing.

In the case of furniture, the volume of credit increases during business depression and decreases during business

prosperity—a movement which, as we know, is precisely the opposite of that existing in the case of clothing. How can this difference in reaction be explained?

There are probably two factors involved. In the first place, we must remember the difference in the product. In the case of furniture there is always a larger stock on hand and a consequent incentive to dispose of this stock when a depression occurs. Moreover, it must not be forgotten that the greater durability of furniture offers more security for the credit granted at the time of sale. In the second place, the fact, noted above, that the granting of a considerable amount of credit is a fairly well accepted practice in the furniture business eliminates the reluctance of the furniture dealers to use more liberal credit terms as an instrumentality in building up sales when they disclose a tendency to fall.

Another discrepancy between the furniture and the clothing businesses is that in the former the percentage of credit outstanding increases from the smaller towns to the larger towns, until the extremely large cities are reached. In these last, a smaller amount of credit is extended. In the same way, it may be pointed out that the amount of credit grows as the size of the store increases, until extremely large stores are reached, where again the reverse is true.

Another contrast between the furniture and the clothing industries is that in furniture the size of the town appears to have little effect on the credit practices of a store of a certain size. The lack of variation in the practices of stores of uniform size, even when these establishments operate under diverse urban conditions, again suggests the fact that a greater stabilization in the furniture business has led to uniformity in the credit practices of stores of similar sizes. In other words, the line of action of a store of a given magnitude is fairly

well determined, regardless of the size of the town in which it is operating.

Finally, it may be pointed out that in the results by years similar differences are seen when these results are compared according to the magnitude of the various establishments. The outstanding credits of stores of medium size decreased from 1921 to 1924; whereas the small stores and the very large establishments showed an increase. The increase in the ratio for the smaller establishments is evidently to be interpreted as a larger volume of credit in the sale of the small articles which doubtless constitute a considerable proportion of the business in such stores. On the other hand, the increase in the large stores may be due to one of two facts. It is possible that, having exercised judgment in the extension of credits during the years of depression, they started with a low ratio in 1921 and gradually enlarged the amount of credits outstanding by taking advantage of the ensuing period of prosperity. A second possible explanation of the increase is that these larger organizations possess efficient credit departments, which enable them to extend more credit than is customary in the case of organizations with less modern credit facilities.

3. Jewelry and Hardware

We take up next the jewelry stores. Concerning these, the information at our disposal reaches back to 1897, and it is accordingly possible to speak of long-time tendencies.

The southern states here, as in the case of the clothing and the furniture industries, tend to show the highest ratios throughout the entire period. This would seem to suggest that there are some real reasons for the persistence of this state of affairs in the South.

The tendency of the ratio to increase is correlated

with the general development of the section in question. California, for instance, shows a continuous increase from 1897 on; while in Virginia the ratio increases only up to the beginning of the Great War. On the other hand, in Colorado and Texas the ratio increases only from the beginning of the War.

Among individual cities, Cleveland is notable for possessing the highest ratio. This is not surprising in view of its industrial development. The other cities follow the line of sectional differentiations: New Orleans, in the South, has the next highest ratio; Boston and New York City follow; while Kansas City, in the Middle West, has the lowest ratio. In the case of cities, we notice the same correlation between the growth of the city and the increase of ratio for its stores. The ratio for New York City, for instance, remains relatively stable; for Kansas City, there is a slight decline; while in all the others there is a continuous increase.

Again, as in the case of clothing and furniture, we find that the ratio increases as we pass from small to large stores. The increase in jewelry is more regular, although less pronounced, than in clothing and furniture. The fluctuations of the ratio by periods are the same for all stores with assets of over $50,000. Fluctuations in these stores follow the general trend of business conditions. It is notable, however, that the largest village stores disclose the greatest increase and are apparently not subject to the fluctuations of general business: the ratios for these show continuous increase, differing in intensity, but not in direction, from one period to another.

The analysis by cities yields still more interesting conclusions. The ratio keeps on increasing as we go from very small towns to cities with a population of over 5,000. The large cities of 50,000 and over have a

ratio but slightly higher, and in some cases their ratio is less than for cities with a population of from 100,000 to 500,000. Especially remarkable is the persistent tendency for the ratio to fall as we get to the very large cities. This, it will be remembered, was true also in the case of clothing and furniture.

The situation by periods is not so uniform as the one we found for the average. Up to 1910 the ratio declines as we go from small to large cities; from 1910 to 1918 the high ratios are found in the very small and in the very large cities, while in the middle population groups the ratio is low. After 1918, however, the situation resembles that which is found on the average. The inference from these figures might perhaps be put in a rather broad generalization, namely, that the growth of credit is a natural effect of economic forces. In the first place, the small town is no longer so much as formerly the natural economic center of the surrounding agricultural area. This is a consequence of the spread of the automobile habit among the farmers, freeing them to some extent from sole reliance on the small town. In the next place, we have to note the competition in the business of the mail-order houses and department stores in the larger centers, ascribable in part to the introduction of the parcels post. The opportunities for safe and sane credit extension seem also to increase more markedly in the larger cities.

The connection between the size of the store and the size of the city in which it is located is quite noticeable here as in the case of the clothing business. It is, however, decidedly different in nature. The figures seem to indicate that large stores extend most credit in small places, while small stores do a thriving credit business in the larger cities. That the larger stores extend more credit when located in smaller towns is probably due to the fact that the market for such luxuries as jewelry

is contracted, and that too in a degree more than proportional to the diminution in population. The fact that small stores extend more credit in the larger cities is to be explained by the consideration that the records of many jewelers doing partly a watch repairing and partly a jewelry manufacturing business have been included in the material utilized for the large stores.

Taking up next the recent period from 1919 to 1925, the analysis is of interest, because it covers about the same period as that utilized for the clothing and the furniture industries, and because it affords a test of the reliability of the conclusions based on a study of the information available for this recent period. This test is afforded by comparing the conclusions regarding long-time tendencies drawn independently from an analysis of this later period with the conclusions of the same character discussed above as to the entire quarter of a century.

The southern states show the same tendency to attain the highest ratios, with Colorado and California following them closely. The movement of the ratio by years reflects the same connection that we have found between the developing prosperity of a locality and an increase in the ratio of its stores. It also shows the same influence as to the relative stability of the locality and the effects of cyclical factors. Thus we find that in such states as California or Kentucky or Pennsylvania, which have remained stable during the last six years, the ratio for their stores fluctuates according to general business conditions; while in a state like Texas the ratio rises regularly with only slight interruptions, which are obviously not related to the trend of general business conditions. An even more striking manifestation of the tendency is seen in states like Indiana and Iowa where the ratio declines without any particular reference to the state of affairs in the rest of the country.

The ratios for the cities change from year to year very much in the way disclosed on the basis of the long-time analysis. Cleveland has the highest ratio, which fluctuates widely with the ups and downs of the industrial cycle. The New Orleans ratio, second in magnitude, fluctuates almost as much, and follows apparently a law of its own. The New York City and Boston ratios are much more stable, the latter showing a mild tendency to decline. Classifying stores by the amount of current assets, we find that the ratio is low for the small stores and high for the larger stores. The year-to-year changes in the ratio follow the general fluctuations in business conditions. A notable fact is that in cities with a population under 100,000, the high points of the ratio are found in 1920 and 1923; while in cities over 100,000, the high points for stores of the same size come in 1921 and 1924. This reminds us of the agricultural theory of business cycles, that the effects of the cycle are felt first in agriculture and the businesses directly dependent upon it, and that the effects spread to other industries and businesses only after a certain interval. As in the long-time analysis, the ratio for the small stores tends to decline and that for the larger stores to increase. This seems to corroborate the hypothesis mentioned in the furniture analysis as to the growing respectability of credit in the case of customers of retail stores, and as to the adoption of this competitive weapon by the larger stores.

The analysis by population groups does not yield anything strikingly new and may, therefore, be passed over with reference for details to the study itself.

Finally, in the case of hardware, the data are limited to the metropolitan district, including parts of Connecticut, New Jersey and New York State. In this area, however, data have been secured from a sufficient number of firms to render possible a detailed analysis

of credit practices as influenced by local variations and size of establishment.

While the area covered was that of Greater New York, we were able to secure data for the stores in the localities adjacent to this area. The conditions in New York City and in New Jersey were found to be quite similar; but, on the other hand, notably different from those existing in the rest of the area under consideration. This distinction of credit practices is perhaps due to the differing nature of the population and of their living conditions. One criterion of the nature of the population is the percentage of inhabitants owning their own homes. Such a study suggests the considerations as to whether the town is a residential or factory district; whether the people are living in one- or two-family homes or in tenements; whether they are commuters or work in their own neighborhood; whether they are in a lower- or higher-income group; and whether the population is stable or the reverse. The result obtained by correlating the outstanding credit with home ownership is that a relationship was found to exist between the two: localities with a high home ownership were those in which a large amount of credit was granted.

So far as the size of towns is concerned, the credit ratio seems to be highest in the small towns, decreasing as the size of the town increased. This, it will be remembered, is the opposite of the situation in the other industries. With reference to the size of the establishments, it was found that the large stores extended the relatively larger amounts of credit. The ratio of the large stores in New York City is as high as for Connecticut or other places outside of New York City, and exceeds the average for the total area. This fact is probably to be explained by the difference in the character of the articles carried by the large stores.

So far as the year-to-year movements are concerned, a tendency is noticeable for the amount of outstanding credit to fluctuate in response to general business conditions; that is, to increase in times of prosperity and to decline in times of depression. The outstandings are particularly high for 1925. This might well be a reflection of the spread of instalment selling in the applied lines of business merchandising articles that constitute a part of an ordinary hardware store's inventory.

4. Conclusions

The general conclusion from the study of consumers' credit is that it is difficult to make broad generalizations as to the question that is commonly asked, namely, the increase in the amount of consumers' credit as a whole. The factors are so complicated and the situation differs so considerably according to the character of the business, the localities, the groups of population, and the size of the establishments concerned, that it seems almost impossible to draw any inference that is valid for the country as a whole. The conclusions to which we have come may, however, be summarized as follows:

In the case of strictly consumers' goods, with the exception of hardware, we find that the amount of credit increases as we go from small towns to large, and from small stores to large. The extremes of the scale—the very small towns and stores, and the very large cities and stores, moreover, show a break in this rectilinear tendency: the former show an unexpectedly high ratio and the latter a surprisingly low ratio.

The long-time trends with regard to towns and stores classified by size are about the same: the amount of credit granted by small stores and in small towns declines with the passage of time; that for large cities and stores increases. It is obvious that the reasons for this

are to be found in the increasing urbanization of the country, and the passing of the small town as the economic center of the surrounding agricultural area as a consequence of the automobile, as well as of the changes wrought in retailing by the mail-order houses and the department stores. Finally, attention must be directed to the influence of the graduation of credit to purchasers in the retail stores into a standard retail practice taken over and rationalized by the larger and more progressive stores.

The inference might be drawn from the above considerations that so far as the trend is toward an increase in the rate and number of the large cities and the large stores as contrasted with the small towns and the small stores, it is possible after all to answer the general question as to the change in the total amount of credit granted. The answer would be in the affirmative; that the volume of credit has increased and will probably continue to increase, for the same reasons that are responsible for the growing urbanization of the country and the increasing centralization of mercantile institutions. The rapidity or magnitude of the increase in each particular line of the retail business depends obviously on the intensity of this tendency to centralization, and on the ability of the store to retain its type according as the small town in which it was established grows into a large city. Thus we have found that in clothing stores the grant of credit has not increased since 1914—a fact that is in all probability a reflection of the rather slight tendency to centralization observable in this line of business.

A certain amount of qualification would perhaps be advisable, in view of the obvious growth on the one hand of the department stores and chain stores and on the other of the mail-order houses—a growth which results in the diminution of the relative importance of

the old-time specialty store which has been the exclusive object of this survey and to which the generalizations relate. It is claimed that these new retail institutions extend less credit than the regular stores, and that their rapid growth is destined to bring about a reduction of credit to consumers by retail organizations. The changes in credit, however, engendered by this evolution of new types of stores are not so striking as the preceding argument would lead us to expect.

In the first place, it is important to know the amount of retail trade done by these new stores and houses. According to the figures[1] of Nystrom, who is responsible for the only estimate ever made regarding these matters, department stores, chain stores and mail-order houses taken together accounted in 1923 for 28 per cent of the total volume of retail business. While these establishments thus handled a considerable share of the retail sales, it is not to be assumed that all of this business was done on a cash basis. Of the three types of retail organizations mentioned above, only chain stores are supposed to adhere strictly to a "cash-and-carry" principle; yet it is significant—and this is our second point—that chain stores flourish chiefly in those lines of retail business in which little or no credit is ever granted, such as tobacco, drugs, novelties, etc., or in which the credit granted is of short duration, as in the grocery business. Thirdly, both department stores and mail-order houses grant considerable amounts of credit, the magnitude of which is rather surprising to one who secures his notions from a superficial observation of the very large cut-price department stores, and from listening to the complaints of small-town storekeepers about the inroads made by the mail-order houses. Fourthly, the tendencies observed for the department stores indicate that the amount of credit granted increases in the

[1] *Harvard Business Review*, Vol. III, pp. 157–158.

same way as for ordinary stores, that is, with the size of the stores, with the population of the locality in which they are found, and with the passage of time. Finally, the supplanting of old-fashioned stores by new types of stores more conservative as to the granting of credit must obviously bring about a certain adaptation of the policy of those stores which survive to the new conditions in which they find themselves. One aspect of this adaptation will inevitably be the extension of credit on more liberal terms in order to accommodate those who cannot profit by the lower prices of the department or the chain store. The conclusion from this argument is that, while it is true that the newer and more centralized retail institutions grant less credit and that they grow at the expense of regular specialty shops, the final effect of the phenomenon on the total amount of credit granted to consumers is likely to be unimportant.

Long-time trends in the granting of credit show, on the whole, a close correlation with the growth of the unit for which the credit practice is analyzed. We have noted the relation between the fortunes of cities and stores grouped by size and the amount of credit granted in or by them. This seems to be true of the different sections of the country. The Far West, in which the greatest relative advance has taken place during the last quarter of a century, discloses a large relative increase in the amount of credit business; while such states as Indiana and Iowa show a diminution. The same situation prevails in the rapidly growing cities which had reached 100,000 population in 1920; the amount of credit granted in these cities has exceeded even that for the larger cities.

Another consequence of growth, stability or stagnation is the responsiveness of the granting of credit to fluctuations in general business. We have learned that

general business conditions make quite a difference in the credit policies of retail stores: in the case of clothing and jewelry the two factors are correlated directly, while in the case of furniture they are correlated inversely. This, we have seen, may be explained by peculiarities attaching to the particular line of business in the use of credit. Again, sectional differences seem to be enhanced in times of depression and diminished in times of prosperity. Whatever be the effects of the business cycle, it seems that they stand out most prominently when the long-time factor makes for stability; on the other hand, where the sectional tendency is one of growth or stagnation, this condition appears to overshadow or to minimize the cyclical oscillations. It is possible, however, that these inferences may be the consequence of the utilization of the data on an annual basis.

With reference to other conclusions, irrespective of time, we note the persistence of sectional differences. In every case the southern states retain their supremacy as the section in which the largest amount of credit is granted. This is true also of New Orleans, treated as an individual city. There must, therefore, obviously be some powerful factors at work which would explain this situation in the South.

Another conclusion relates to the connection between the amount of credit granted by stores of a certain magnitude and the size of the city in which they are located. In the clothing and the furniture businesses, small stores grant most credit in small towns, and large stores in large cities; but in the jewelry business the situation is the reverse. If we assume that a wide granting of credit presupposes adaptation of credit to the market which it serves, this correlation would indicate that to a place of a certain magnitude, a store of a definite size is best

adapted as fitting most easily into the scheme of things and may therefore be declared to be the most typical.

The conclusions which we have reached in this section apply, as has been explained, to consumers' credit in general. To the extent that instalment sales form a conspicuous part of credit sales as a whole, the tendencies are true also of instalment credit. There remain, however, some specific and additional differences, which pertain especially to instalment selling. It is to a study of these differences that we shall now proceed.

CHAPTER IX

THE SPECIFIC CHARACTERISTICS OF INSTALMENT CREDIT

We have seen that instalment credit is not only a part of all credit but, in the narrower sense attached to it in this discussion, a part of consumers' credit. We have accordingly treated some of the problems of credit in general, as well as some of the problems arising out of consumers' credit. There now remain to be considered the problems which attach to instalment credit in particular as distinguished from the other forms of consumers' credit. It becomes necessary, therefore, to point out the respects in which instalment credit differs from the other forms of consumers' credit.

From one point of view the essential difference might be declared to be that of fractional rather than of lump-sum payment or, in other words, the periodicity of the successive payments. So far as the purchaser is concerned, this is a matter of great importance. It will, however, be treated more properly in the next book under the head of the effects of instalment selling upon the consumer. What we are concerned with here is rather those distinctions between instalment credit and consumers' credit in general which flow out of the differences in the character of the goods to which instalment selling is applied as well as out of the differences in the conditions and consequences attaching to instalment selling in particular.

1. Differences in the Commodities

We may begin the analysis by inquiring as to the specific characteristics of the goods to which instalment

selling is applied. Consumers' credit in general is utilized, as we have seen, in connection with articles ranging from the simplest to the most complicated, from the ephemeral to the lasting, from the cheapest to the most expensive. To many such articles, however, instalment selling has never been applied, and will in all likelihood never be applied. Beefsteaks and eggs will probably never be sold on instalments.

The first characteristic, therefore, of modern instalment credit is the relative durability of the commodity. Instead of commodities providing a single use to the purchaser, that is, commodities the utilization of which is equivalent to their complete destruction, we are dealing with commodities which afford a succession, perhaps even a long succession, of uses. A suit of clothes will endure at least a few months; a washing machine will, if properly cared for, last a few years; the average life of an automobile is from five to seven years or more, according to quality; a piano may continue to give satisfaction for a generation; certain pieces of furniture will last still longer. Durability is the first characteristic that is shared in common by most of the articles sold on instalment.

This fact leads to a rather important inference. In Chapter VII we discussed the alleged distinction between producers' goods and consumers' goods, and learned that the ordinary conception of consumption was inadequate. When now we are endeavoring to distinguish between consumers' credit in general and instalment credit in particular, a more significant classification of consumers' goods may be made. For the purpose of this particular study, it is more important to distinguish between goods before utilization and goods after utilization. The essential characteristic of instalment credit, so far as the element of durability is concerned, consists

in payment for the goods before utilization as compared with payment after utilization.

This distinction deserves further discussion.

Much of the apprehension regarding instalment sales today rests upon the conviction that it is unsound to use or to consume first and to pay afterwards. If one buys a package of cigarettes on credit and smokes the cigarettes, the seller must look for his payment elsewhere than to the property sold. Let us consider, on the other hand, the more durable goods of which the automobile is a type. If one buys an automobile with a seven-year life and pays in advance for the service which the automobile can yield, say, during a single year, and if the purchaser furthermore pays for the remaining six years' service within twelve months, the seller needs, at a pinch, to look only to the automobile itself for full and final payment. The typical purchaser who secures his automobile on the instalment plan pays at the beginning of each time interval for the uses of the automobile which he expects to enjoy during the particular period. This is really an understatement of the case; for normally the equity of the buyer is such that he has in effect invested some of his savings in the future uses of the automobile. The credit granted to the purchaser of the automobile is indeed like the credit that might be granted to the buyer of the cigarettes in that they both represent consumers' credit; but the essential difference between the two is that the instalment credit granted to the buyer of the automobile is credit which must be liquidated before consumption; whereas the credit granted to the purchaser of the cigarettes must be liquidated after consumption.

There appears to be little excuse for treating the automobile as "consumed" when it is placed in the hands of a customer. During its seven-year life it will, usually, pass through the hands of several consumers, each of

whom will use up only a part of the car, so to speak. The automobile is "consumed" as it is used up. In other words, the purchaser of a new car has a stock of unused transportation, of which he may, and often does, resell a portion. Does not the financing of an unutilized stock of transportation constitute quite as legitimate a claim upon loanable funds as the financing of a stock of any so-called producers' or capital goods? When a finance company restricts itself to financing the unused stock of transportation service implicit in the automobile, as is normally done by most of the so-called credit companies, can it be considered to be extending consumption credit at all, as opposed to production credit, except indeed in the sense that by production credit we mean the production of a money income? When the financial arrangement contemplates payment by the buyer before utilization, is not the instalment credit to be differentiated from ordinary consumers' credit on the ground of the security offered by the unused stock of utilities? The more durable the commodity, the greater, of course, will be the quantity of this unused stock.

Viewed from this standpoint, it would appear that we should consider the sale of a new car as a sale of only a fraction of a car (the fraction depending upon the length of time that the buyer may be expected to drive it), under financial terms which will guarantee that the car will be passed on to a second or perhaps a third person at a price which will cause the car to move at no loss. In other words, the instalment selling of automobiles tends to place upon the dealer the responsibility for marketing and keeping continuously in use a stock of transportation. The market problem then becomes something far more than the mere selling of new cars. The essential criterion, therefore, of the transaction is to be found in this characteristic of payment before utilization. For all practical purposes this

is far more significant than the ordinary distinction between producers' goods and consumers' goods.

The other characteristics of instalment credit so far as they pertain to the nature of the commodity can be passed over more rapidly.

The second is the relatively high price of the commodity. Instead of the accounts opened by the ordinary retail dealer on individual purchases as low as a few cents, instalment selling deals, or at least has hitherto dealt, with a higher grade of commodities, the average unit price of which runs into the tens, hundreds, or even thousands of dollars.

The third characteristic, which is a corollary of the two which have just been mentioned, is the protracted length of time that ensues before the final payments are made, and the more or less widely separated intervals at which the instalments are due. The usual outlays of the individual are made almost from day to day, as for his food or carfare, or from week to week, as for his laundry. With a few minor exceptions, among which the ten-payment clothing plan is prominent, the length of time that elapses between the successive fractional payments under the instalment plan is reckoned by the month, by the quarter-year, or even by the year.

Finally, the last characteristic of goods sold on instalment is that they are to a large extent of recent origin, designed to satisfy new wants of the individual. As we have seen above, most of the goods which figure in the volume of present-day instalment sales are, apart from the few examples of furniture, pianos, sewing machines, and books, of very recent creation. Automobiles, radios, electric washers, and the like, were all of them practically unknown a decade or two ago.

The four characteristics, therefore, of articles to which instalment credit has been applied are durability, ex-

pensiveness, wide separation of payments due, and novelty.

2. Differences in the Conditions

We come next to a series of distinctions between instalment sales and ordinary open accounts that flow from the conditions affecting the credit granted to the consumer.

In the first place, the sale in question is apt to represent a single transaction, not likely to be duplicated, at least in the immediate future. The ordinary consumer repeats his purchase of bread and of milk from day to day; and his conduct in paying for today's sales will throw some light upon his probable conduct in regard to next week's or next month's sales. But while the purchaser of a radio or of an automobile will no doubt prefer ultimately to replace the old commodity by a new one, he is not likely to do so in the immediate future and even if the transaction is repeated, the subsequent purchase is not ordinarily made from the same dealer.

Secondly, just because it is a single transaction, it usually has no predecessor, at least not in the immediate past. Since no daily or weekly record of past transactions is kept, the seller is without these important means of estimating the credit standing of the purchaser, and must depend upon a different series of considerations.

Thirdly, because of the relatively greater expensiveness of the article, the amount of credit to be granted to the purchaser is larger than in ordinary consumers' credit. While this, of course, will tend to make the seller more wary, it brings with it, on the other hand, a considerably greater degree of hazard.

Finally, as a corollary of the protracted period between down payment and final payment, we have an

increasing necessity on the part of the seller to bridge the interval and to meet the risks of non-payment. There are indeed some exceptions. The study of the Ohio University Bureau of the ten-payment plan[1] shows that the average length of credit extended under that method was a little less than in the ordinary thirty- or sixty-day method. In the main, however, and especially as applied to the more durable commodities, the above statement is valid.

If now we combine these points of view, it will be seen that the peculiar hazards of instalment selling deal with the three points of delinquencies, defaults and repossessions. Of these, the first two represent differences in degree as between instalment credit and ordinary consumers' credit, while the third typifies in the main a difference in kind.

Delinquencies are indeed found wherever credit is granted. In the case of successive payments under the instalment system, however, delinquencies in the first period may be more or less closely connected with those in the successive periods, and call for special treatment. On the other hand, the early delinquencies may be made good later on, so as to obviate a default in final payment. Again, defaults are found whenever contracts for future payments are not observed. In ordinary consumers' credit, however, when a default occurs, the obvious recourse of the seller is to sue the defaulting purchaser, and in certain cases of fraud, etc., even to imprison him. The commodity on which default in final payment occurs may have entirely disappeared, either because it may have been completely consumed, or because it has been otherwise disposed of by the purchaser.

[1] H. D. Comer. *The Ten-Payment Plan of Retailing Men's Clothing.* Special Bulletin of the Bureau of Business Research, College of Commerce and Journalism, Ohio State University. Columbus, Ohio, 1926.

The chief characteristic, however, of the articles sold under the instalment plan is that the seller retains some legal right in the article sold. With this lien on the article, the seller possesses an added security for the credit advanced. This is, as we know, not something entirely new, nor is it limited to consumers' goods. Conditional sales are of great antiquity, and have long been applied to producers' or capital goods. Conditional sales in general merchandise, however, have constituted only a small part of the whole, and in the great mass of cases the seller has been accustomed to elect other remedies in order to secure the payment of his account. In the case of modern instalment selling, on the contrary, this characteristic of repossession or, as it is called in some lines, of revert, is applicable to well-nigh every article sold. It forms almost without exception the final security of the seller. It is the one characteristic which has given rise to more problems than all the others combined. Repossession, then, is the outstanding feature of instalment credit, which distinguishes it from other kinds of consumers' credit.

Before, however, we take up the subject of repossession, let us say a few words more about delinquencies and defaults.

First, as to delinquencies. Delinquencies on the part of the instalment purchaser are in some respects not very different from those found in ordinary consumers' credit. The failure to meet the obligation at the appointed time may be due to some oversight or defect in the process of collection. The purchaser may be entirely able or willing to pay his instalment, but he may have forgotten about it. It is to be assumed that the seller pursues proper collection methods, that his follow-up plan is adequate, and that the machinery is up-to-date. But no matter how admirable the collection department may be, some delinquencies are apt to arise from the fact of

misplaced credit or confidence. The original credit analysis thus becomes of primary importance.

The delay in meeting the obligation at the particular time may be due to two sets of causes. The purchaser may be an entirely good credit risk as an individual, but unforeseen circumstances over which he has no control may cause a delay in the payment. These unforeseen circumstances may be caused by natural happenings, as fire or flood or earthquake; by general business depression or reversals; or by personal reasons, as accident or illness or the increase of other obligations. As over against the difficulties or obstacles which it is almost impossible to foresee are to be put those hazards which are concerned with the original credit standing of the purchaser. In the case of an automobile, for instance, some individuals are for one reason or another clearly unsuitable risks. They are in too low an income class, or they possess personal characteristics which render them in general undesirable, or at least doubtful, risks. Since the grant of the original credit to the instalment purchaser is, therefore, the very center of the entire transaction, too much emphasis can not be put upon this fact. Carelessness in the grant of the original credit is the principal cause of delinquency or delay in payment.

It is on this point that the so-called repossession study throws not a little light. The study, printed in Appendix Six, covers the records of about 2000 cars which were actually repossessed. The study shows that a large proportion of the purchasers whose cars were finally repossessed became delinquent in the first month after the sale. This fact indicates that the causes which operated to induce the delinquency were in a large part present at the time of sale. In so far as this is true—and there is every reason to believe that it represents the typical experience—a large number of delinquencies and defaults might be obviated by the exercise of more

scrupulous care at the time when the credit is granted. To the extent that the delinquencies occur in the later months, however, the other and more unpredictable difficulties play a rôle—difficulties which can be overcome only in part by the exercise of even the most meticulous care in the granting of original credit.

Delay in payments is always unwelcome as well as expensive, largely for the reason that it necessitates an increased elaboration of the method of collection, with all the consequent embarrassments. But if the delinquency cannot be overcome, as a result of the more deep-seated reasons that do not lend themselves to ideal collection methods, the delinquency is to be dreaded as a forerunner of default. Instead of mere delay in payment, we now have a complete and final failure to meet the obligation. The default represents, in the clearest light, the hazards and defects in the grant of original credit.

The ratio of defaults to total purchases naturally differs not only from trade to trade, but from concern to concern. Book publishers tell us, for instance, that in the case of some of their copyrighted products, which are impossible of duplication or even of imitation, they are accustomed to sell at a high rate of profit and to push the sales to a point where defaults amount to as much as twenty or thirty per cent of the total purchases. Moreover, they expect practically nothing as a result of repossessing and reselling the books. Again, a furniture dealer, whose business is carried on with people of low incomes and of questionable credit standing, informs us that his prices are put at a point approximately twenty-five per cent higher than they would have to be, if the goods were sold for cash. In this case the differential, less certain operating costs, marks the maximum to be absorbed by losses which are due to lax extensions of credit.

These, as well as an array of similar facts, bring up a

series of considerations which must be analyzed in order to judge of the next step, which logically follows that of default. We come, in other words, to a discussion of what is to the dealer the central characteristic of instalment selling—repossession.

3. Repossessions

Here we are confronted by four problems:

(1) Is repossession necessary in order to insure success, or is the mark-up adequate to render repossession unnecessary?

(2) Do the proper arrangements exist whereby the seller can legally repossess the commodity; and does the machinery needed for repossessing the article exist?

(3) Is repossession economically practicable?

(4) What is the resulting gain or loss?

(1) *Is repossession necessary?*

The mark-up is clearly of considerable significance because the amount of the loss which will ensue depends upon the possible margin of profit. In any particular business the question arises as to whether the margin of profit is wide enough to permit sales to be pushed to the point where they will inevitably result in a large number of defaults and consequent losses. On the other hand, the margin of profit may be so narrow that no chances can be taken in extending credit to any purchaser except to those who can surely be counted upon. These facts will differ from trade to trade and from individual to individual.

(2) *Is repossession legally and actually practicable?*

In our historical study, we have learned that the situation today is quite different from what it was at the outset. At the beginning, the legal complications and difficulties seemed almost insurmountable; at the present

time, there has been such an adjustment of legal conditions to business needs as to reduce the legal formalities to a minimum. With the reduction in these difficulties and in the expenses involved, the second question may therefore be answered almost everywhere in the affirmative.

The possibility of repossession does not, however, depend upon the legal situation alone. Although the legal rights may be secured, it may, nevertheless, be impossible to enforce these rights. The car may have been destroyed by collision, it may have been confiscated, or it may have been stolen under conditions which make it virtually impossible for the attempt at repossession to succeed. Finally, the lack of an adequate collection department, whether of the dealer or of the finance company, may interpose all manner of obstacles in the path of repossession. Many a default is followed by a failure to repossess.

Even if the car is finally repossessed, however, the question arises as to whether it was worth while to have done so. We come, in other words, to the third problem.

(3) *Is repossession economically practicable?*

This is a more complicated question, and comprises within itself a series of important problems. Some of these may be characterized as follows:

(a) Will repossession tend to cause hard feelings, or in any other way tend to injure the business concern?

Merchants who employ instalment selling as a device to increase the volume of their business are generally of the opinion that, by granting this credit privilege to their customers, they are not only directly increasing their business, but are also indirectly augmenting their sales by advertising the fact that they are prepared to render such a service to their patrons. Repossession of the

article, it is sometimes feared, is likely to counteract these beneficial results. A prominent furniture house, for instance, has stated that rather than to take the risk of this injury to their business, they find it advantageous to charge a price sufficient to absorb all possible losses from default.

This "actuarial method" of computing charges does not seem to be economically defensible. Instead of extending credit on a scientific basis, a sum large enough to cover the extraordinary loss experience is incorporated in the charge, thus removing the incentive to achieve the lowest possible cost. It is really a species of insurance, which ought to be unnecessary.

In order to maintain with possible new customers the reputation which they have so laboriously achieved, these dealers even go so far as to grant all manner of additional accommodations to purchasers; and it is only in the most extreme and unusual cases that the original default is terminated by a repossession. In other lines, however, and especially in the case of the automobile, these considerations are of minor importance, and repossession may be declared to be virtually the only practicable method of averting losses when defaults have occurred. Regardless of whether the dealer actually resorts to repossession, the possibility of repossession affords him a psychological advantage when he finds it necessary to urge the payment of the instalment.

(b) Has the commodity a resale value sufficient to justify repossession?

The answer to this question depends upon a variety of considerations. At the very forefront is that of depreciation. Depreciation, of course, means something different to the seller from what it means to the buyer. So far as the consumer is concerned, depreciation is connected with the gradual wearing away of the physical properties of the commodity; that is, with the suc-

cessive fractions of utilization. It is only so far as the consumer contemplates the sale rather than the use of the commodity that he is concerned with the depreciation which is of primary interest to the dealer. The merchant who sells the commodity thinks of the depreciation as a decrease in the price which the article will bring on its resale. In some cases the depreciation is enormous because of the prejudice against second-hand goods. Most people, for instance, are unwilling to use clothing which has been previously worn by someone else; and as a consequence a seller of clothing will ordinarily be reluctant to enter into an arrangement whereby final payment for the commodity depends in the last instance upon its resale value. Similar considerations apply in the case of books, where, as we know, the discrepancy between the original and the resale price is usually so great that the amount obtained from the resale does not compensate for the expense of repossession. The same conditions apply, although perhaps in varying degrees, to other articles, especially in the case of those used for purposes of ostentation; for it is primarily in these articles that the element of so-called "competitive consumption" exercises its strongest influence in inducing an individual to spend more ostentatiously than his neighbor. When an individual endeavors to outdo his neighbor by purchasing for five hundred dollars the same radio or victrola which the latter has secured in a less pretentious cabinet for two hundred dollars, we see in operation this element of competitive consumption or conspicuous waste.[1] It may even be seen in the decision of the individual to buy a high-priced rather than a low-priced car. This same prejudice against second-hand goods in general applies more or less to all automobiles, even where the element

[1] The influence of "conspicuous waste" has been made familiar by Thorstein Veblen, *The Theory of the Leisure Class*, New York, 1899.

of conspicuous waste or competitive consumption is absent. A car that has been run only a few hundred miles may be to all intents and purposes really a better car than when it was absolutely new; but despite this fact, its selling value will have fallen by a third or even more.

It is largely because of this depreciation that the element of down payment becomes so important. The size of the down payment, or the percentage of the total price demanded at the time of sale, may, of course, be significant from another point of view. It may be utilized, in other words, as a means of differentiating classes of customers according to their varying credit rating. An individual who cannot make a substantial down payment is presumably in a lower-income class; at all events, his income is so absorbed by other obligations that there remains only a small margin out of which to make his down payment. If this is true, there will naturally be a danger that he may be unable to meet the subsequent payments. Moreover, a down payment of substantial size is generally required by the prudent dealer as evidence of the fact that the purchaser intends to retain the article and to meet subsequent payments. In so far as low down payments render it possible for the dealers to make sales to individuals of low income, or with small margins out of which to make payments, or to those who are not fully resolved to continue payments, the system obviously adds to the difficulties that cluster around repossession. At all events, it is apparent that the down payment must be at least sufficient to offset the immediate depreciation which has taken place in the article.

Of similar significance is the other question involved in the so-called terms, that is, the length of the period during which the instalments are to be paid. The longer the time granted, not only the more pronounced will

be the risk of delinquency and default, but the greater will be the chances of loss in the repossession through the increased depreciation.

We see, therefore, that the economic practicability of repossession depends upon a variety of considerations which differ with the type of article, the character of the business, and the habitual ideas of the purchaser. What is true of one type of business or one kind of commodity is not necessarily true of another; what is true of one type of business at one time may not be true of the same type of business at another time.

The final decision as to repossession, however, depends upon the resulting gain or loss. We come, then, to the last point.

(4) *What is the gain or loss on repossessed goods?*

This, after all, is the real test which distinguishes instalment credit from other forms of consumers' credit. In arriving at an answer to this question, we must take into consideration the various intermediate outlays involved, such as the expense of repossessing, the cost of reconditioning or repairing the article, and the actual selling expenses of the article after it has been put into good condition. The primary factors, however, are the amount of unpaid balance, and the actual resale price. In other words, we come back to the point mentioned above as to the degree of utilization before or after payment. If there is a lag of utilization behind the payments, there can be a profit in the transaction only if the remaining instalments plus all the other outlays do not exceed the resale price. The losses on repossessions have become in a real sense the central point of instalment selling in automobiles.

We see then that instalment credit, while it partakes of the nature of consumers' credit in general, has special

difficulties of its own. Instalment credit, like all forms of credit, depends primarily upon the credit rating of the individual: the confidence to be reposed in the purchaser is the foundation of the entire transaction, whether in instalment selling or in any other kind of selling on credit. In the next place, we note that instalment credit, like all forms of consumers' credit, is to be judged from the point of view of the economic nature of the utilization. If it is positive or even neutral utilization, it is legitimate: if it is wasteful or destructive utilization, it is, from the broad economic point of view, illegitimate. Finally, we have ascertained that instalment credit differs from other forms of consumers' credit in certain special respects; that these criteria, among which is the important one of the distinction between utilization before or after payment, differ with the character of the commodity and with the conditions affecting its use.

Having thus reached a conclusion as to the essential nature of instalment selling, it remains to apply these considerations to the commodity which stands in the forefront of the system of instalment selling, namely, the automobile. Before taking this up, however, it will be wise to discuss one last objection commonly urged against modern instalment selling—the objection, namely, that instalment credit, while possibly legitimate in the case of necessaries, ought not to be applied to luxuries.

of sumptuary laws in former times was the readiness of the governing classes to subject their inferiors to restrictions which they themselves found it easy to evade. Although sumptuary laws have now disappeared, not a few of the ideas as to luxury still prevalent in modern times are due to a survival of this feeling. Even in the United States at present, we are sometimes told with a great show of indignation that the miners in the coal fields are so stupidly extravagant as to wear silk shirts, or that the working girls in the factories venture to adorn themselves with silk stockings or fur coats.

It is quite true, however, that almost from the beginning we find riotous expenditure and deplorable ostentation connected with luxury. It was this fact that led moralists to discover in this profuse prodigality evidence not only of individual corruption but of the decay of public morals. The second reason, therefore, which explains the prevalence of interference with consumption in the shape of sumptuary laws, was the desire to check practices that were considered in themselves so injurious to public morals as to be wicked and reprehensible. What was now forbidden was not simply extra modish attire but costly food, expensive drink and extravagant practices of any kind. The gondolas in Venice are to this day painted black because of the legislation against the riotous display of colors in both the craft and the costume of the gondolier that marked a certain period in Venetian history.

To these reasons for sumptuary legislation, which might be characterized as the aristocratic and the ethical reasons, there must be added the economic motive. As has been pointed out recently,[1] the economic motive consisted sometimes in the endeavor to encourage home industries and to discourage the buying of foreign

[1] Frances E. Baldwin. *Sumptuary Legislation and Personal Regulation in England.* Baltimore, 1926. p. 10.

goods; sometimes in the attempt on the part of the prince to induce his subjects to save their money, so that they might be able to help him financially in time of need.

Most of those who criticized the sumptuary laws of old did so for an erroneous reason. They objected to any interference with luxury on the ground that luxury was in itself a good thing, and they defended this practice largely on economic grounds. The apologists for luxury sought to minimize the ethical objections by emphasizing what they considered the far more important and countervailing economic advantages. This argument is frequently found even at present. It consists in the plea that luxurious expenditure is beneficial because it affords employment to labor.

The merest tyro in economic reasoning, however, will nowadays perceive the weakness of this contention. If luxurious expenditure is productive simply because it employs labor, the accidental breaking of a window pane or the wanton destruction of a growing crop is also productive, in so far as it will require labor to repair the damage. The fallacy obviously consists in the assumption that the wealth spent in luxurious outlay would not otherwise be devoted to production. Clearly, however, if the spendthrift chooses not to waste his funds, they will take the form of the purchase of securities, of investment in some enterprise, or of a cash balance in the bank; and in each case they will ultimately be devoted to production and thus give employment to labor. This argument is accordingly no defence of the evils of ostentation or of the passions of sensuality.

But while this argument against the older view is illicit, it does not prove that the older view is defensible. Above all, even if the older view was defensible at the time, it does not prove that it is applicable under the

introduction of the new idea of a non-reprehensible species of luxury.

A wittier defense of the relativity of the idea of luxury is found in the following passages from Voltaire, which fail in their English dress to disclose the charm of the original, as contained in his *Philosophical Dictionary*.

> In a country where all the inhabitants went barefooted, could luxury be imputed to the first man who made a pair of shoes for himself? Or rather, was he not a man of sense and industry?
>
> Is it not just the same with him who procured the first shirt? With respect to the man who had it washed and ironed, I consider him as an absolute genius, abundant in resources, and qualified to govern a state. Those, however, who were not used to wear clean shirts, considered him as a rich, effeminate coxcomb who was likely to corrupt the nation.

A little later he adds:

> On the invention of scissors, which are certainly not of the very highest antiquity, what was not said of those who pared their nails and cut off some of their hair that was hanging down over their noses? They were undoubtedly considered as prodigals and coxcombs, who bought at an extravagant price an instrument calculated to spoil the work of the Creator. What an enormous sin to pare the horn which God himself made to grow at our fingers' ends! It was absolutely an insult to the Divine Being. When shirts and socks were invented, it was far worse. It is well known with what wrath and indignation the old counsellors, who had never worn socks, exclaimed against the young magistrates who encouraged so dreadful and fatal a luxury.

Finally he points out that abuses are not limited to luxury:

> If by luxury you mean excess, we know that excess is universally pernicious, in abstinence as well as gluttony, in parsimony or in profusion. I know not how it has happened, that in my own village, where the soil is poor and meagre, the taxes heavy, and the prohibition against a man's exporting the corn he has himself sown and reaped intolerable, there is hardly a single cultivator who is not well clothed, and who has not an ample supply of warmth and food. Should this cultivator go to plough in his best clothes and

with his hair dressed and powdered, there would in that case exist the greatest and most absurd luxury; but were a wealthy citizen of Paris or London to appear at the play in the dress of a peasant, he would exhibit the grossest and most ridiculous parsimony.

To these arguments as to the relativity of luxury there have now been added the conclusions of modern economists concerning the advantages of a varied consumption and the influence of changes in the standard of life as creative forces in progress. Professor Patten was one of the earliest of modern economists to formulate what is now a commonplace, namely that "the primary law of social progress is that society progresses from a simple, costly, and inharmonious consumption to a varied, cheap, and harmonious consumption."[1] It may in fact be stated that civilization depends upon the multiplication of wants. If goods are to be divided into necessaries, conveniences and superfluities, progress may be described as the process of converting superfluities into conveniences and conveniences into necessities. The diversification of consumption lies at the root of human development.

It is undoubtedly true that we can have no lasting progress without the accumulation of capital and the application of labor to raw material; but it is equally evident that while a population, every member of which is devoted entirely to wheat raising or to the making of rough clothes or shelter, may be very estimable, it will indisputably be lacking in many of the qualities that we associate with higher civilization. No one will make fine or beautiful things unless there is a demand for them; and this demand inevitably implies luxury somewhere.

Moreover, the kind of consumption indulged in by an individual may react not only upon his well-being in

[1] Simon N. Patten. "The Theory of Dynamic Economics." Reprinted in his *Essays on Economic Theory*, ed. by R. G. Tugwell, 1924. p. 57.

general but upon his productivity as well. The more varied, the higher, and the finer his tastes—in short, the more developed his standard of life—the greater will be his intelligence, his efficiency and his capacity for real co-operation. Economists have in modern times made intelligible what is known as the economy of high wages. High productivity, high efficiency, high standard of life, go hand in hand with inventive ingenuity, with increase of capital, and with augmented prosperity. Modern capitalism with the factory system is responsible at once for greater production, increased profits, and higher wages. In this process no small part is played by the development of the standard of life and the gradual transition of commodities from the category of luxuries to that of comforts and necessities. The luxury of one age becomes the necessity of the next.

3. Conclusions

From the above considerations flow definite conclusions. In the first place, by the term "luxury" we must not characterize any particular commodity. If the term "luxury" connotes something costly and expensive, the costliness or expensiveness may change from year to year, relatively as well as absolutely. That is to say, economic progress, like improvements in transportation, inventions in industry, and mass production, may lessen cost and bring the commodity in question within the range of a continually wider class of consumers. Moreover, even if there is no absolute decrease in cost, the change in the wealth, or the purchasing power, or the standard of life of the individual may make the particular commodity relatively inexpensive to him—that is, it may now be comparatively unimportant in relation to his entire range of expenditure. In other words, what he considered a luxury yesterday, because he could ill afford it, he may deem a necessity tomorrow.

The second conclusion is that even where the commodity is still a luxury in the sense of being costly and expensive, it by no means follows that it represents unproductive consumption. We revert here to our fourfold classification of consumption goods. If the article in question really increases production in the sense of creating new wealth or augmenting economic welfare, it is of little consequence whether it is expensive or inexpensive, if from the point of view of production it yields a surplus. It is entirely conceivable that expensive raw materials will create a more valuable product than poorer and less expensive materials. What is called a luxury, therefore, becomes uneconomic or morally reprehensible only when it belongs to our third and fourth classes of consumable goods. A luxury can be deemed economically wasteful or morally reprehensible only when it conduces neither to the maintenance nor to the increase of material wealth or of economic welfare. From this newer point of view, to characterize anything as a luxury does not necessarily imply any derogatory judgment from either the individual or the social point of view.

The third conclusion is the undesirability of interfering with the ordinary consumption of the individual. The old sumptuary laws have disappeared, never to return. The prohibition of luxury is like the prohibition of usury. In the Middle Ages the taking of interest was prohibited, just as was the consumption of luxuries; and for a similar reason. In the modern age of competition, we have virtual freedom in the taking of interest just as we have substantial freedom in the purchase of luxuries. The usury laws were more or less defensible because under the then existing economic conditions the practice of making advances on the personal credit of the borrower lent itself to peculiarly flagrant abuses: the old sumptuary laws were more or less

legitimate because under the conditions of a static society where custom reigned supreme the influence of a progressive standard of life was relatively slight. With the gradual change in economic conditions, usury laws, like sumptuary laws, broke down, not so much because they could no longer be enforced as because they had become a hindrance to progress. It is only in exceptional cases and under exceptional conditions that we find any survival of interference with the charging of interest or with the consumption of commodities. Where conditions of free competition do not exist, as in the case of a striking discrepancy between the economic power of the borrower and that of the lender, the law still endeavors to inflict penalties for usury, although the enforcement of even such laws becomes increasingly difficult. Where the consumption of a particular commodity is regarded by the community as constituting a public peril, we find legislation against it, as at present in the United States in the Eighteenth Amendment. But so difficult of enforcement and so productive of new evils is the prohibition law that, in the case of a substantial minority at least, it arouses widespread dissatisfaction.

Apart from such extreme instances, the modern world has realized the futility, as well as the undesirability, of interference with the consumption of the individual. Just as the old Prussian king formulated the law of religious tolerance in the statement that everyone should be free to achieve salvation in his own fashion, and just as Carlyle maintained that no man believes what his father believed; so modern social science teaches that it may be a mark of progress that no man consumes the same kind of goods that his father consumed. The modern age is the age of liberty—liberty of speech, liberty of thought, liberty of production, liberty of consumption. The only justification for interference with individual liberty is

the unquestioned creation of more true liberty. We authorize the government to enact factory laws or to prevent so-called unfair practices in business, not, as did the mediæval legislator, in order to destroy competition but, on the contrary, in order to promote competition by raising it to a higher level. Interference of this kind, if wisely exercised, increases production and economic welfare.

As compared with ancient or mediæval times, however, production is virtually free and unfettered. If a man can ordinarily be trusted to select the most approved methods of production and if, as is substantially true, the level of competition is a high one, he will do the best for the community by doing the best for himself. So, in the same way, if the standard of life is high and continually rising, the individual in selecting his own articles of consumption will ordinarily do the best not only for himself but also for the community. In other words, wise consumption, like true production, will be subserved by a policy of freedom. Above all, nothing will be gained by attempting to characterize certain forms of expenditure as reprehensible because they involve what may at the moment be deemed a luxury. It is, in short, no longer a question of luxurious versus productive consumption. A luxury may be no less economically justifiable than a necessary; a comfort may be no less morally reprehensible than a luxury.

We are led therefore to declare as essentially invalid the widespread objection to instalment selling on the ground that it favors a regrettable tendency to purchase luxuries at the cost of the more important comforts and necessities

CHAPTER XI

THE NATURE OF THE AUTOMOBILE

We have learned in the preceding chapter that commodities like automobiles, radios and others of similar character are not necessarily to be disparaged because they are deemed to be luxuries. We have still to inquire whether they actually are luxuries and whether they represent a productive or a harmful utilization. Both problems are parts of the larger question whether the automobile is to be considered economically a good or an evil; whether it is something the extension of which is to be welcomed or to be only grudgingly and doubtfully accepted.

Let us take up first the problem of the productive utilization of the automobile. In the analysis it will be best to make use of the four divisions of consumption with which we have become familiar and to consider each of them in turn in its application to the automobile. It will, however, be convenient to reverse the order and to begin with the third and fourth categories.

1. Is the Automobile Destructive or Wasteful?

In what respects, then, may the automobile be considered distinctly injurious, as representing a destruction of wealth?

That it does, to some extent at least, represent a destruction of wealth is undoubted. The number of accidents to life and limb has increased enormously since the advent of the automobile and the figures of deaths, both of pedestrians and of those that ride in motor cars, have grown in alarming proportions. As will be seen

from Table XXI, the number of deaths due to automobiles has increased from about 9,000 in 1917 to almost 20,000 in 1925. Comparatively few of these were due to grade-crossing accidents, the total number of deaths from accidents at grade crossings amounting in 1925 to only 2,206, as shown by Table XXII. The great mass of accidents are naturally found in the centers of population, owing to the density of the traffic. This is reflected in Table XXIII.

Furthermore, it must be remembered that the figures in question refer only to fatalities. Far greater would be the toll of non-fatal accidents, not a few of which are so serious that they will ultimately lead to permanent disability or even to death. Of this serious side of the situation, we have unfortunately no satisfactory statistics. The toll of pain and misery which is due to the automobile is a huge one. Furthermore, it is clear that the automobile has played its part in facilitating robberies, to the extent at least that the bandits have been able to ply their nefarious trade with amazing success as a result of the ease of the "getaway." When all such occurrences are lumped together, it is obvious that the automobile is responsible for a definite increase in the destruction of life and wealth. If this consideration exhausted the catalogue of its effects, we should be justified in declaring the automobile a curse, rather than a boon, to modern civilization.

It must, however, not be overlooked that almost every new invention has brought in its train some evil consequence. When the horse supplanted the wheelbarrow in China, accidents hitherto unknown became frequent; and this led to a great outcry on the part of the inhabitants. When the railroad replaced the stagecoach, a far greater quantity of sinister happenings occurred. In the United States, as elsewhere, the roadhouses were ruined and whole industries, like that of

the cattle drovers, were destroyed. So far as loss of life is concerned, it will be remembered that the killing of the English statesman Huskisson on the very day the first great English railway line was opened created such consternation as almost to put a stop to the further development of the new form of transportation. It was not alone the physical hazards but also the æsthetic dangers of the railway which led many critics not only to oppose the introduction of the iron horse with all the vehemence of which they were capable, but also, as in the case of Ruskin, to refuse to the very end ever to travel by this "accursed" method of locomotion.

But although the death toll has amounted to tens of thousands of lives annually, and although the increased ease of transportation has enabled many a criminal to escape the toils of the law by employing the steamship or the railway, none of these considerations has stood in the way of a continuous and ever more rapid utilization of this revolution in the means of transportation. This is due, in the main, to the fact that the evil consequences have come to be considered not as inevitable, but as in part remediable, and on the whole offset by compensating advantages. As a result, the energy of mankind has been directed not to abolish the railway, but to prevent some of its unnecessary consequences. The disappearance of grade crossings, the use of better rails and of improved rolling stock, the more efficient organization of the transportation system, and the employment of a continually higher grade of officials have all contributed to lessen some of these unfortunate results. We find here and there, in the United States and abroad, a large railway system which enjoys the proud reputation of not having killed a single passenger within the year; even though the same notable success has not yet been achieved with reference to the employees.

The history of the railway is duplicated by that of almost every modern invention. The list of industrial accidents due to the machinery utilized in the factory grew in the beginning to portentous proportions. But that did not prevent the recognition of the fact that the introduction of machinery must in every conceivable way be promoted. The avenue of reform disclosed itself before long through the adoption, first, of all manner of devices designed to protect the laborer against accidents and, finally, of the policy of workmen's compensation and of accident insurance. Progress was attained not by prohibiting the inventions but by minimizing as far as possible their injurious consequences. The goal has indeed not yet been reached, and there remains much to be done in the way of mitigating the noxious effects of present-day machinery and of modern inventions. But the world has long since come to the conclusion that most of the so-called injurious consequences are susceptible of remedy and that, even where they are ineradicable, the evil must be weighed up against the good before we pass judgment on the invention as a whole.

The automobile is clearly in the same class. Many of the evils associated with the automobile are susceptible of removal by wise action. Greater stringency in granting licenses, more drastic penalties for careless driving, improvements in the city streets and the traffic regulations, and a thousand and one betterments of every kind must and will gradually be introduced.

As a matter of fact, while motor accidents have increased absolutely, they have decreased relatively. As appears from the table below,[1] the fatalities per 100,000 of registered cars have decreased from 178 in 1917 to 100 in 1925.

[1] Cf. *Facts and Figures of the Automobile Industry*. Published by the National Automobile Chamber of Commerce, 1926.

TABLE XXI

SUMMARY SHOWING RELATIVE DECREASE IN NUMBER OF AUTOMOBILE FATALITIES

Year	Automobile Fatalities	Motor Vehicle Registration	Fatalities per 100,000 Registration
1917	9,097	5,104,321	178
1918	9,457	6,146,617	154
1919	9,825	7,565,446	130
1920	11,074	9,231,941	119
1921	12,370	10,463,295	118
1922	13,676	12,238,375	112
1923	16,452	15,092,177	109
1924	17,566	17,593,677	100
1925	19,828	19,954,347	100

An even greater decrease has taken place in the ratio of the number of grade-crossing fatalities to the number of automobiles registered, as will be seen from the table below.[1]

TABLE XXII

SUMMARY SHOWING RELATIVE DECREASE IN NUMBER OF AUTOMOBILE FATALITIES AT GRADE CROSSINGS

Year	Motor Vehicle Registration	Fatalities
1920	9,231,941	1,791
1921	10,463,295	1,705
1922	12,238,375	1,810
1923	15,092,177	2,268
1924	17,593,677	2,149
1925	19,954,347	2,206

From this it appears that the increase in grade-crossing fatalities has by no means kept pace with the number of registered cars. This is due, of course, partly to the elimination of grade crossings, which is now proceeding apace in this country; but it is also due in part to the augmented use of safety devices.

[1] Cf. the statistics issued by the American Railway Association.

Moreover, it will appear from the table on the following page that while the number of fatalities, as stated above, is naturally far greater in the denser centers of population, there has been a well-marked decline not only in the relative proportion, but also in the absolute number, of fatal motor accidents, especially in the larger cities. This is, of course, due to the improved traffic ordinances and the greater precautions that are gradually being observed.

The situation, in fact, is bringing its own remedy with it So serious did the conditions become a few years ago that annual conferences have been held on street and highway safety; while the National Automobile Chamber of Commerce publishes monthly bulletins on traffic and safety, embodying current studies on every phase of the question as investigated by the various highway departments, safety councils, motor clubs and health departments. As a result of the increasing attention given to this matter, five principles developed in the so-called Hoover conference have been laid down embodying methods for improving traffic.[1]

1. Public Opinion.
   Ostracism of the careless driver will make him mend his ways.
2. Swift Justice.
   Prompt punishment of the reckless by responsible courts will cause respect for law. "Fining squires" should be eliminated.
3. Playgrounds.
   Children are entitled to proper and adequate play

[1] *Facts and Figures of the Automobile Industry*, 1926. p. 24. The First National Conference on Street and Highway Safety was held in Washington in December, 1924, and was opened by Secretary Hoover. The *Reports of the Annual Conferences* contain much pertinent material. Cf. also the *Report of the Committee of Nine on Financial Responsibility for Automobile Accidents*. New York, 1927.

TABLE XXIII

SUMMARY OF RECENT MOTOR CAR ACCIDENTS IN VARIOUS CITIES

1. 100,000 Population and over

City	1924	1925	City	1924	1925
Pittsburgh, Pa.	187 (33*)	162 (35*)	Syracuse, N. Y.	39	28
Los Angeles, Cal.	263 (12*)	237 (6*)	New Haven, Conn.	45	40
San Francisco, Cal.	113	101	Springfield, Mass.	26	20 (14*)
Washington, D. C.	104	89	Des Moines, Iowa	18	14
New Orleans, La.	83	80	Wilmington, Del.	26	18
Minneapolis, Minn.	83	76	Cambridge, Mass.	19	18
Denver, Colo.	39	38	Reading, Pa.	21	18
St. Paul, Minn.	53	47	Kansas City, Kans.	20	19
Birmingham, Ala.	56	53			

2. 50,000 to 100,000 Population

City	1924	1925	City	1924	1925
Mobile, Ala.	13	12	Elizabeth, N. J.	16	12
Berkeley, Cal.	15	8 (4*)	Troy, N. Y.	7	4
Fort Wayne, Ind.	19	13 (3*)	Tulsa, Okla.	24	15
Haverhill, Mass.	13	7	Allentown, Pa.	11	8
Lawrence, Mass.	21	15 (5*)	Wilkes-Barre, Pa.	20	18
Lincoln, Nebr.	10	9 (6*)	Roanoke, Va.	13 (3*)	11 (1*)
East Orange, N. J.	7	6 (2*)			

3. 25,000 to 50,000 Population

City	1924	1925	City	1924	1925
Phoenix, Ariz.	13	12	Amsterdam, N. Y.	3	2
Pasadena, Cal.	15 (4*)	13 (1*)	Lima, Ohio	6	4
San Jose, Cal.	28	25 (11*)	Lorain, Ohio	15	14 (2*)
Stockton, Cal.	19 (7*)	13 (9*)	McKeesport, Pa.	19	17 (9*)
Pueblo, Colo.	9	8 (2*)	Greenville, S. C.	15 (4*)	3
Meriden, Conn.	5	4	Sioux Falls, S. D.	8 (3*)	3
Bloomington, Ill.	8	5 (1*)	Galveston, Tex.	15	10 (1*)
Decatur, Ill.	13 (5*)	10 (3*)	Fond du Lac, Wis.	5	3
Everett, Mass.	4	3	Kenosha, Wis.	13 (4*)	11 (2*)
Salem, Mass.	10	6	Sheboygan, Wis.	9 (1*)	2
Pontiac, Mich.	20	14			

* Accidents included in total, but occurred outside of city limits.

space. Efforts to restrict play in the streets should be accompanied by providing play space in every neighborhood.

4. Scientific Knowledge.
   Every community should have a complete up-to-date record of the volume of traffic on its streets, and the circumstances of all highway accidents. Such knowledge is essential in determining improvements.
5. Build for Present and Future.
   Streets should be modernized to meet current needs. Dead-end streets, grade crossings, especially in cities, draw-bridges, narrow bridges, and other "bottle-necks" which obstruct traffic should be removed. Streets must be improved for present and future needs.

So far as the increase of crime is concerned, sensible people realize that the ease of the "getaway" represents after all only a small part of the problem, and that what is here involved is no less than the entire question of crime prevention with its penological, its legal and its social implications. In short, the fact that the automobile is attended with certain regrettable consequences by no means necessarily stamps it as an evil. Even if it sometimes destroys life and occasionally helps to destroy wealth, we must consider, first, whether these consequences are inevitable; and, second, whether the amount of wealth created by the automobile does not so vastly transcend its powers of destruction as to leave little doubt where the balance is to be found.

We come finally to a consideration of the automobile not as actually destructive of wealth, but as conducing to waste. For, as we have seen, waste, like destruction, is to be put under the head of unproductive utilization.

The automobile is, indeed, not infrequently utilized

so as to involve waste. We have only to call attention to the joyrides of the irresponsible drivers and their companions; to the mushroom growth of the low-class road-houses; to the excessive use of leisure and the unnecessary periods of idleness; to the consequences of the growing congestion in our city streets and the loss of time involved. To close one's eyes to these and similar facts would be futile.

Here again, however, we must distinguish between use and abuse. Mankind is so constituted that some individuals will always be found so deficient in stamina or in other moral qualities as to turn what is essentially good into its opposite. To object to the proper use of anything because of its improper use by some is illogical. Private property is on the whole upheld by general consent as conducing to progress and as engendering in the individual qualities that are deserving of commendation; but when private property leads to vanity, to pride, to avarice, to sensuality, or to exploitation, it is not so admirable. The playing of cards may be an innocent and legitimate diversion; when it leads to reckless gambling, it becomes reprehensible. Golf playing is a valuable means of recreation; when it is carried to such an extreme as to involve neglect of duty and inattention to the more significant ends of life, it is undesirable. There is, in short, scarcely a single thing that is not susceptible of abuse. Is it not the part of wisdom to seek to remedy the abuses while endeavoring at the same time to strengthen and to fortify the proper use? Here again, as in the preceding case, we must consider whether the wasteful utilization is inevitably bound up with the use; or whether, on the other hand, it does not constitute an abuse, rather than a use.

To answer the question, therefore, with reference to the automobile, we must consider its proper use. In other words, we reach the first two categories in our

classification and must analyze the extent to which the automobile either maintains or creates wealth. To what extent, in other words, does the automobile represent the productive utilization of wealth? And how is this degree of productive utilization to be compared with what we have seen to constitute its undoubtedly unproductive utilization?

2. Is the Automobile Productive of Wealth?

When we come to close quarters with this problem, we must again revert to the threefold aspects of the concept of productive utilization with which we have become familiar. In other words, we must ask: how far does the automobile lead to an increase of pecuniary profits; how far does the automobile create new wealth; how far does the automobile contribute to economic and social welfare?

The first question is virtually reducible to this: to what extent does the automobile earn any money for its owner?

To answer this, one has only to look about him to realize that to a great extent the driving of automobiles has become an important form of business. The well-nigh complete disappearance of the horse-drawn vehicles has led in all of our cities to the introduction of taxicabs run by independent operators or, more usually, by large and prosperous companies. The use of motor busses in the country is only in the first stages of its development; but has already proved to be so lucrative as to constitute a menace to our railways, with the result that the railways themselves are now employing the automobile as an integral part of their system in order to maintain and to increase their profits. With the improvement of our roads, with the greater perfection in the motors and, what is perhaps of still more importance, with the possible invention of some new

and cheaper fuel, the earning capacity of the automobile may be expected to grow so rapidly as to lead to its inclusion among the most widely utilized media of modern transportation. Moreover, with the augmented profits of both motor producers and motor transportation businesses, the yield of the taxes imposed on the enterprises may be expected continually to increase and thus to contribute its constantly growing share to the support of the public burdens.

More important from the social standpoint than the question of earnings for the individual is that of the actual creation of wealth. Where the automobile is used in ordinary agricultural, industrial or commercial operations, this effect is beyond the peradventure of doubt. The automobile tractors on the farm have been a worthy complement to the harvesters, the reapers and the other machines which have so signally contributed to the growth of American agriculture. The more recent introduction of the use of motor trucks in the building enterprises and in the distributive work of the country has effected a complete change in many lines of commerce and industry, and has contributed in no small measure to cutting down the cost of operations and to preventing what otherwise would have been a still more rapid increase in the recent outlays of construction and distribution. For, apart from the apparent increase in cost due to the change in the general price level, the chief factor in the growing outlays for production is to be found in the rise of wages. The contribution of the automobile in saving labor force has been so prodigious as to engender a veritable revolution in the economy of effort.

The second advantage which may justly be credited to the automobile is the improvement of our roads. Until the advent of the automobile, the condition of the ordinary roads and highways in the United States,

sometimes even in the neighborhood of the larger centers of population, was lamentable. This was primarily due to the fact that, in contradistinction to the situation in Europe, the railroad in the overwhelming mass of cases preceded settlement, except in the small fringe of territory on the eastern seaboard. In the territory outside of the thirteen original states, the common highway was largely represented at first by the canals and later by the railroads; and all that was really needed for a long time was the creation of local roads and byways. With the rapid growth of population, however, the situation soon changed, and the construction of railroads, although of colossal magnitude, no longer kept pace with the economic needs of the country. Study after study was published showing the actual economic loss to which not only the farmer but the suburban dweller was subjected by the lack of fairly decent roads such as had been constructed all over Europe in the seventeenth and eighteenth centuries. The building of better roads, was, however, almost everywhere prevented by the reluctance of the taxpayer, and especially of the farmer, to undergo the burden of the expense involved.

With the advent of the automobile, all this was changed. Improved roads were a prerequisite to the greater utilization of the automobile. While the new methods of construction largely increased not only the initial outlay, but also the expenses of maintenance, the taxpayer was in many cases soon educated to the point of realizing that, despite the additional cost, there was a decided balance of economies. Moreover, the use of public credit in this respect was before long recognized as entirely legitimate, and what would have been completely impossible under the old fiscal system was now rapidly put into effect. Although the expenditures for new roads grew to tens and even hun-

dreds of millions of dollars, necessitating aid by the states to the localities, and by the Federal Government to the states, public opinion rapidly crystallized to the point of recognizing the essential productive character of this outlay. Thus it is obvious that while the automobile has been one of the chief causes of the greater expenditures of modern government, it has indirectly been responsible for a net increase in wealth. It is giving to this country a network of roads which are not only superior to those found in Europe, but which are rivaling in magnitude and economic importance the achievements of the railroads themselves. While the railroad industry today represents an investment of over twenty billions of dollars, it is scarcely hazardous to affirm that when our system of improved roads has reached, as it is fast reaching, its maximum development, they will represent a total investment superior even to that of the railway. If the railroad was one of the chief causes of the increase of American wealth in the nineteenth century, the automobile, through the impetus given to good roads, may well merit the distinction of being one of the chief causes of the creation of wealth in the United States during the twentieth century.

Scarcely less significant than the use of tractors and motor trucks in general industry, which thus leads to the creation of social wealth through improved roads, has been the influence of the use of the automobile proper for the purposes of the individual. Wherever conditions make it possible, the automobile is employed by the individual to take him to and from his factory or place of business. This becomes especially important in our larger centers of population. With the increasing tendency to the urbanization of modern society, and with the advent of the modern skyscraper, used primarily for business purposes, the problem of the housing

conditions of the population is almost everywhere becoming acute. With every additional skyscraper for business purposes comes the need of an extension of the housing area. The problem of the suburbs is one of menacing proportions, which is being only partially solved in our great centers of population by the construction of subways. To the solution of this problem the automobile is contributing its important share; and it is incidentally helping to rearrange our great metropolitan centers by necessitating the construction of broad avenues, which will let in more light and air. But with the suburbanization of our great centers, which, as we have just seen, is a necessary concomitant of the skyscraper, serious economic problems present themselves. To put it in terms of dollars and cents, the saving of time ascribable to the use of the automobile alone represents a substantial economy and thus constitutes a productive utilization comparable to the services afforded by the trolley, the subway or the railroad. In the one case, as in the other, there is a distinct addition to wealth, so obvious as scarcely to need elaboration.

We come finally to the third and most important aspect of the problem, namely, the increase of economic welfare, or of the immaterial wealth which is destined to react upon and to augment the material wealth. There are several points of view from which this topic may be considered.

The first has reference to the general problem of relief from the pressure of constant work. Under the conditions of modern American life, with its unremitting intensity of exertion, the need of relaxation becomes more pronounced than it is in other countries, or than it was in former times, when the pace was less killing. Familiar to all are the advantages of an alternation in work. Gladstone found his salvation in wood chop-

ping; Jefferson cut short his cabinet meetings in order to return to his favorite task of constructing sundials. Every physician is constantly urging the need of change of occupation.

When we add to the advantages of mental diversion in itself the benefits derived from prolonged presence in the fresh air and from the extrusion of old thoughts through the necessity of devoting one's entire attention to the matter in hand, the influence of the automobile in promoting the general health and efficiency of the individual can scarcely be denied. Who is there among professional men, jaded by continuous application to work, to whom a spin in an automobile does not bring intellectual and physical refreshment? What is true of the professional man is almost equally true of the ordinary business man. What golf has achieved in the modern life of America has been accomplished to an even greater extent by the automobile; with the added difference that while golf still remains in no small measure the pastime of the wealthy, the advantages of the automobile have been brought within the reach of a far wider group of the community. The effect of the automobile in augmenting the benefits of relaxation from continuous and unremitting toil is not to be overlooked.

Secondly, the automobile has emphasized the advantages accruing from travel. Despite the development of the railway, most people have nevertheless been unable to move far or often from the place of their birth or residence. The facility afforded by the automobile for a rapid and cheap transference to unfamiliar scenes and new surroundings is giving to great numbers the opportunities which have hitherto been reserved to the fortunate few. It is scarcely necessary to direct attention to the beneficial influences of travel in broadening the outlook and improving the capacities of the

individual. The extension of these opportunities to the whole community cannot fail to increase the general efficiency. Travel, like relaxation, is among the cherished immaterial goods of modern society.

Thirdly, the automobile is greatly altering the life of the farmer. It is fast converting the agricultural community from an assemblage of more or less isolated individuals into a group that is becoming mutually helpful and truly co-operative. In so far as the automobile, the telephone and the radio are augmenting the attractions of the farmer's career, they are contributing to the maintenance of what is still, and what will long remain, the foundation of American economic life. Entirely apart from the direct economic productivity of the automobile in the daily life of the farm, its indirect consequences in this respect are deserving of attention. In fact, it may be said that just as the employment of fine machinery permits American industry, despite the high money wages, to compete with that of other countries; so, notwithstanding the decreasing fertility of the soil, the widespread use of the automobile may help the American farmer to maintain his position in competition with the virgin fields of South America or Siberia. It is playing its rôle in preventing the American farmer from being reduced to the level of the peasant, the peon or the ryot.

Fourthly, attention may be called to the effects of increasing familiarity with the mechanical side of the motor car. The training that the ordinary man receives in his acquaintance with, and his mastery of, machinery tends to enhance his alertness and his general efficiency. We have only to compare the hack driver of old with the modern chauffeur in order to realize the emergence of a new, and on the whole an improved, mental type. The farmhand of former days was only too often a mere clodhopper: the need of handling and repairing the

motor has nowadays altered his mental outlook and his capacity of performance. The traveler from Europe is amazed by what he calls the American wonderland of industry and the remarkable efficiency displayed by our workmen in town or country. Is it not true to affirm that among the causes which have in recent years contributed to this situation is the advent of the automobile, and the improvement in the intellectual equipment of the ordinary man as a result of familiarity with mechanism?

Thus, from every point of view, whether of the direct or the indirect creation of wealth, whether of the increase of material or of immaterial wealth and economic welfare, the balance of advantages seems to be in favor of the automobile. It is sometimes used wastefully, it is occasionally used destructively; but in the great mass of cases it represents productive utilization and therefore a true increase of wealth.

If, then, the automobile is to be welcomed from this point of view, ought it nevertheless to be frowned upon as a luxury, and as thus causing a diversion of human energy from the more important to the less significant ends of economic and social life?

3. Is the Automobile a Luxury?

This brings us back to the points which have been stressed in the preceding chapter. We have learned that luxury is a relative concept, and that the luxury of today becomes the comfort or the necessity of tomorrow. We have seen that a so-called luxury should be deemed economically objectionable or morally reprehensible only when it conduces neither to the maintenance nor to the increase of material wealth or of economic welfare. We have pointed out that the paramount consideration is that of the influence on the standard of life, and that

the economic as well as the ethical hope of society is to be found in the progressive amelioration of this standard.

Applying these considerations to the automobile, is it really open to serious doubt that to the degree to which the automobile is symptomatic of this higher standard of living, it is to be welcomed? It is indeed true that in not a few cases the automobile does represent a misdirected energy on the part of the individual as well as of society. So far as the individual is concerned, it is undoubtedly true, as we shall see in the next chapter, that his judgment is sometimes distorted by the facts of his environment. In his desire not to be outdone by his neighbor and in his readiness to subscribe to every passing whim or craze of the members of his particular group, the individual will not infrequently purchase an automobile when he has no economic or moral right to do so. He may not only have a distorted sense of values himself, but he may even sacrifice the comfort or, in isolated cases, the necessities of those about him. The weak-kneed and the spineless will be found here, as in every other phase of human life.

The same thing is sometimes true of the group as a whole. Where the community is suffering from the lack of elementary comforts, where the housing shortage is acute, where the conditions of the milk supply are deplorable, where poverty and want stalk abroad, it will not contribute to the social contentment to have the owner of the expensive automobile flaunt his magnificence in the face of all this poverty. It would in such a case be a problem not so much of the contrast between luxuries and necessities as of the distinction between the higher and the lower uses of wealth.

But is it fair to take the above as a picture of true conditions? Is the weak brother symptomatic of the mass of consumers? Does the automobile connote a lower rather than a higher use of wealth? So far as the

individual is concerned, it is indeed possible that the purchase of an automobile will necessitate changes in the ordinary conduct of affairs. But what of it? If the members of a family prefer to spend less on unnecessary food; if they decide to wear more inexpensive clothing; if they choose to have fewer servants and to do more of the housework themselves; if all these and other economies are practiced in order to permit them to acquire an automobile, is there any legitimate ground for criticism? Is it not hazardous to deny to the individual the right to arrange his scale of satisfactions to suit himself? Can any alteration in the character or the scope of consumption take place without a rearrangement or a modification of some of the constituent elements?

If we leave the individual and come to the group as a whole, is the situation not analogous? Must we not look at the problem in the light of existing facts and of the undoubted growth of the prosperity of the workmen? The old Marxian concept of the growing pauperization of the community has long since been abandoned by sensible thinkers, and has been disproved by the experience of capitalism in the United States. This is not the place to break a lance in defence of our modern industrial system, nor can anything be gained by shutting one's eyes to not a few of the regrettable concomitants of modern capitalism. But if the industrial revolution and the factory system have in the main contributed a balance of advantages to civilization in general, must we not consider the automobile also from this point of view?

Even if the purchase of an automobile means temporary skimping for the individual, is the situation so very different from that of the introduction of machinery in industry? It was at one time thought that machinery would mean lower wages or unemployment for the

worker. We know better now. Even where workers are for the time being displaced, the phenomenon is a purely temporary one. The lower wages, if any, are then endured for the sake of the higher wages which may be expected to follow. How striking is the change in attitude of the American workman to this problem, as evidenced in the recent pronouncements of the head of the American Federation of Labor? But are the same considerations not applicable to the automobile? Is it not possible that the drastic reduction of outlay for other purposes, even if necessary for the present, may before long be counterbalanced by the ability to make increased outlays in the future? These points will receive a fuller discussion later.

The entire life of the community depends at bottom upon the laborer's habits of consumption. In countries or in ages where the standard of life is low, high wages simply afford the opportunity for wasteful and destructive expenditure. The chief argument that was advanced in England in the seventeenth and eighteenth centuries against raising wages was the largely indisputable fact that the workman would dissipate his increased earnings in the tavern. The argument in behalf of high wages in the twentieth century, on the other hand, is that we are contributing to create a higher-class and more efficient workman and that his increased purchasing power will redound to the progress of industry. In the same way, is it not likely that the automobile will come more and more to be regarded as an example not of wasteful, senseless or extravagant expenditure but rather of an opportunity for, and an earnest of, a better utilization of time and energy in the future?

Thus we reach the conclusion. When any new invention is introduced which radically alters our accepted ways of living or thinking, there is bound to be a period of transition, of uncertainty and of adjustment. The

automobile is still in the earliest stages of its adoption, which is spreading by leaps and bounds. Is it too much to say that when the automobile reaches the utmost limit of its extension and the zenith of its employment, it will be seen in its true perspective, and will be recognized, despite all its possible shortcomings and drawbacks, as playing an outstanding rôle in the advance of economic welfare and social progress?

BOOK TWO

THE EFFECTS OF INSTALMENT CREDIT

CHAPTER XII

THE EFFECTS ON THE CONSUMER

AMONG the criticisms commonly urged against instalment selling, the most significant in some respects are those which affect the consumer. It is urged, for instance, that instalment selling reverses the true economic practice of paying for a thing before using it; that it distorts the consumer's judgment; that it discourages savings; that it puts him into a position of virtual slavery; and, in short, that it exerts from almost every point of view a baleful influence on the consumer.

These allegations bring up some rather subtle questions of economic theory which deserve a more extended analysis.

1. THE CONSUMER'S POINT OF VIEW

At the outset, we must note that the consumer's point of view is different from that of the producer. The producer, in the ordinary acceptation of the term, whether he be the manufacturer or the dealer or the banker, measures his prosperity in terms of profits. The consumer, on the other hand, thinks and feels in terms of utilization of services or of commodities. The producer, especially if he pays little attention to the more subtle problems of economics, finds an objective test with which to measure his well-being; the consumer has only a subjective test, namely, the satisfactions of wants that may be secured by him from the utilities in question. In other words, if we do not delve below the ordinary facts of every-day life, we feel that while the income which is of importance to the pro-

ducer is the money income, that which is significant to the consumer is the psychic income. In the one case, what comes in is money or money's worth; in the other, what comes in is the satisfaction of wants, whether physical, æsthetic or spiritual.

From this consideration flows an important fact. Since consumption is individual and the satisfaction purely subjective, there is no way of comparing the satisfactions of one individual with those of another, and no way of measuring the satisfactions of either in terms of external phenomena. It is true that, in the economic life of society as a whole, the anticipated satisfactions of the individual translate themselves into a demand; that this demand of the individual is influenced by that of other individuals so that it assumes a social aspect; and finally, that the demand of all the individuals in the group for a particular commodity is set up over against the supply of that commodity so as to result in a given price in the market. The way in which individual wants are transmuted into money prices is a complicated phenomenon which need not be discussed here.[1] In dealing with the influence of instalment selling on the consumer, we must accordingly go back of the money values or prices of commodities to the feelings of the consumers themselves.

2. Present and Future Satisfactions

The first question here is: Does instalment credit make possible the present enjoyment of goods which could otherwise not be obtained until the future?

Obviously there are three ways in which an individual can secure a commodity. He may save first and buy the commodity for cash; he may save while using the commodity and pay for it later in a lump sum; or he may

save while using it and pay for it in fractional amounts. Instalment credit, in other words, provides a method for acquiring an article where the outlay is too large to be met out of accumulated savings or immediate current income. Through instalment credit the individual secures an immediate present enjoyment of goods which could otherwise not be obtained until the future, if at all.

Is this really an advantage? The answer depends upon three facts: the cost of the service; the satisfactions derived from present enjoyment contrasted with future consumption; and the individual's rate of discounting the future.

The cost of the service is of primary importance. If the charge is too high, the service may not be worth what it costs, and the net result to the consumer may be a loss instead of a gain. This question is so important that we shall deal with it more fully in the next chapter. Here, however, we may take it for granted that competition among those that afford the service will bring the cost down to a point where it is worth while. This assumes that the cost is not misrepresented or concealed—a point that will also receive later consideration.

If then the cost is not excessive, the next points are, on the one hand, to compare the satisfactions enjoyed by the consumer in the present with those which would have been derived from the consumption of the good in the future; and, on the other hand, to ascertain the rate at which the individual discounts the future, that is, the rate at which he compares future with present satisfactions. In the case of the producer, this is a simple matter. All that is needed is to contrast the actual yield in the present with the prospective yield in the future, and then to discount the future yield at the rate of interest which has to be paid. It involves a simple

money computation. In the case of consumers, however, while the cost can be estimated in terms of money, the item to be balanced against the cost is subjective, and can be measured only in terms of individual differences. With the consumer there is no external criterion of the phenomenon, as there is with the producer.

The degree to which a given commodity satisfies the wants of an individual, as well as the rate at which he discounts the future, varies, as do all personal valuations, from person to person. No one but the individual himself can decide that matter. Who can say whether a man should pay a dollar for a lunch or wait until he returns home, where a more elaborate meal can be secured for the same amount? Should he save his summer vacation money now in order to make a world tour five years from now? Shall he take a more frugal meal today in order to be able to go to the opera tomorrow? Countless are the discrepancies in the answers that individuals will give. What is true of the ordinary every-day satisfaction of wants is similarly true of instalment selling. Only the individual can decide whether it is worth while for him: no one can gainsay that decision, for no one can put himself into the other's position.

The opinions of consumers as to their reactions after having used the instalment plan would, indeed, be of some value in reflecting their feelings at the time. But the decision, after all, must be made at the time of purchase and not later; and the fact remains that at that particular moment the instalment plan does appear attractive to multitudes of consumers. That some of them change their minds later is true not only of instalment selling, but of all purchases, whether for credit or for cash, and has no special bearing on the point at issue.

We conclude, then, that while instalment credit

renders possible the present use of a good that could otherwise not have been enjoyed until the future, the advantage of the method, provided that the cost is not excessive, depends upon the degree of satisfaction enjoyed at the present as compared with the satisfaction that would have been experienced in the future, as well as upon the individual's rate of discounting the future; and that, since both of these factors involve subjective phenomena which are incapable of measurement in money terms, the decision as to the desirability of the arrangement must be left to the consumer himself.

In the above discussion we have been dealing only with instalment selling as applied to a particular commodity desired by the individual. There is, however, a wider point of view from which the subject can be envisaged. Without reference to any particular commodity, we may ask, as a more general proposition, whether instalment purchasing tends to bring about the present enjoyment of utilities the consumption of which would otherwise be postponed until a future date.

If we assume that the income used for meeting the instalment payments would otherwise have been employed for the purpose of securing different satisfactions, a study of this problem resolves itself into a consideration of the relation between the amount of the payments and the extent of the utilization.

The problem can be seen in its clearest light if we contrast the purchase of durable goods for cash with the purchase of one-use—that is, of ephemeral or relatively evanescent—goods on credit. When durable goods are bought for cash, the consumer foregoes the utilities which he might have enjoyed in the present through the purchase of ephemeral goods in order that he may enjoy in the future the satisfactions to be derived from using the durable goods. The opposite situation

would result from the purchase of ephemeral goods on credit; in which case future satisfactions are sacrificed for the sake of present enjoyments.

What is the effect of instalment selling upon this situation? It will readily be seen that the answer depends upon the consideration which we have discussed above, namely, upon whether the utilization takes place before or after payment. In fact, there are three possibilities in the instalment arrangement: the payments may lag behind utilization, may run parallel to utilization, or may precede utilization.

From this point of view the question of down payment becomes significant. Does the down payment represent utilities for the future?

We have seen that the initial payment in instalment sales varies from as little as 10 per cent in some of the local retail stores to as much as 40 per cent, or even more, on used cars and other commodities. Without going into details, it suffices to note that in the bulk of instalment business, as it is now carried on, there is a sufficient down payment to constitute payment in the present for at least some utilities which are to be enjoyed in the future. Unless, therefore the down payment is unduly small compared to the value of the commodity, the initial outlay may be said to be of sufficient magnitude to impress upon the consumer a recognition of subsequent benefits to be enjoyed. The down payment is too large to be compensated by immediate enjoyment. The instalment purchaser of the automobile thinks not only of today's ride, but of tomorrow's and next week's and next month's rides.

Knowing that he is purchasing at present a stock of utilities that can be enjoyed in the future, the consumer regards depreciation from a different point of view from that of the dealer. We have seen above that as soon as a car is driven away, its value is decreased by from

one-third to one-half. This is of fundamental importance to the dealer, who may find it necessary to repossess the car. To the consumer, however, it is of little consequence, except in so far as he contemplates its immediate sale. Most purchasers of automobiles buy in order to use, not in order to sell. Where use is the purpose of the transaction, the fact of significance is not how much the car is worth in the market, but how good a car it is and how it will stand up under usage.

Putting it into technical economic language, there is a discrepancy between the reserve price of those who possess newly bought goods and the demand price of those who bid for such goods. Expressed in more common language, this means that individuals who have bought new commodities for the purpose of using them will not sell them forthwith at the low prices offered on the market for second-hand commodities. The utility which the owner secures from the commodity does not decrease as rapidly as does its resale price. We have seen that the dealer, if he desires to have entire security for the credit granted, ought to demand a down payment sufficient to offset the depreciation which automatically follows the transition of a commodity from the new to the second-hand class.

If the down payment and subsequent instalments are kept at such a level that the resale market price of the commodity is at least equivalent to the equity involved, it follows that the consumer's personal valuation of the service which he is securing from the commodity is in excess of what he is paying in instalments; otherwise he could sell to a second individual, who might place a higher value on the satisfaction to be derived from the good.

Finally, if we come to the last step in the transaction, there is in most cases little doubt as to whether the consumer has paid in advance of utilization, if the com-

modity in its remaining condition is of value to him after he has completed all the payments. He has paid for utilities which still remain for him to enjoy. The length of life of the automobile which is paid for in twelve months is from five to seven years. In the case of furniture, while the instalment period may last for two years or even more, most of the furniture itself will probably long outlast the automobile. In the case of pianos, where the instalment period is lengthened to two and a half or three years, their life is to be reckoned by decades or perhaps even by generations. In other words, the average span of life of commodities sold on the instalment system is sufficient to show that, in the bulk of modern transactions to which instalment selling is applied, a considerable utility remains in the commodity even after the final payment has been made.

This analysis leads us to the conclusion that the ordinary purchaser really pays in each periodic instalment for something which he will utilize in the future; and that this situation persists until the final payment, when he finds himself in possession of a commodity which will still be of value to him for a considerable period. It would, therefore, not be correct to say that instalment selling provides present enjoyments at the cost of future utilities. On the contrary, it is evident that instalment purchasers are subtracting from present enjoyments for the sake of storing up future utilities. Instalment credit, in other words, is in this respect more like cash payment than like credit payable in a lump sum.

In so far as this is true, the preference for present enjoyments over future satisfactions discourages rather than encourages instalment purchasers. The instalment plan, to be sure, renders possible a more accurate adjustment in point of time between the satisfaction of a want and the earning of the income which is destined for this

purpose. But instalment credit as actually practiced has in reality only brought somewhat nearer this ideal of the satisfaction coming at the same time as the earning of the income. It is true that when an automobile is bought on the instalment plan, the consumer is not compelled to wait until he has earned enough to pay for it. But it is obvious from the above analysis that even under the system of instalment selling the consumer is, in general, anticipating a use with the initial payment, and that the subsequent instalments as well represent utilities in excess of the satisfactions immediately obtained from the automobile.

The conclusion at which we arrive is, therefore, that it is erroneous to consider instalment credit as eliminating the need of waiting until the purchase price has been accumulated; and that such a result cannot be attained so long as credit departments adhere, as they must, to the practice of considering the resale value of the commodity rather than its specific utility to the consumer.

3. The Significance of Fractional Payments

In what then, it may be asked, consists the essential service of instalment credit to the consumer? The answer is that instalment credit accomplishes its signal service by breaking up total payments into fractional payments. Putting it into more technical language, it may be said that the essential function of instalment credit is to render possible fractional price units. This is in itself a matter of great significance to the consumer. By breaking up the payments it becomes possible to put high-priced durable goods into the immediate possession of consumers of moderate means. This is accomplished, not indeed by eliminating the necessity of earning before enjoying the fruits of labor, but by cutting down the length of the period between the time

when the money is earned and the time when the good is enjoyed. Instalment selling practiced on the pay-before-utilization basis may thus be credited with the outstanding function of breaking up the total utility of a commodity like an automobile into a number of parts, each representing in that case a certain quantity of transportation. These parts are obtained by the consumer one at a time, and are to all intents and purposes paid for in advance. So far as the consumer is concerned, the service which instalment credit renders is comparable to that rendered by the retailer who sells in small quantities commodities that are obtained from the wholesaler or the manufacturer in large quantities.

The criterion as to the desirability of instalment credit is therefore primarily whether the satisfaction obtained from the possession of the durable good so purchased promises to be greater than the satisfaction which would be secured by using the same amount of money in the purchase of other goods. Thus durable goods, like automobiles, furniture, pianos, radios and the like, which are purchased on the instalment plan may be considered as vehicles employed for the "production" of satisfactions—the ultimate aim of all economic activity. It is a question here of the competition between durable and ephemeral goods as the media of securing satisfactions for the individual.

From this point of view, the problem presented to consumers is really not far different from that faced by producers. If the consumer must choose between durable and ephemeral goods, the producer also must reach a decision as to the relative amount of durable goods, or of capital, which he is to employ in his business. Pursuing still further this line of thought, an analogy presents itself between the original industrial revolution and the present marketing revolution. The indus-

trial revolution, which has given us the modern factory system, consisted in taking out of the hands of the individual workman the control over the processes of production. Under the guild system, the individual workman bought the raw material, fashioned the article, and sold the complete product. Under the domestic system, the capitalist assumed control of the first and last functions, but the laborer still controlled the working-up of the product. Under the capitalistic system, as the result of the industrial revolution, the individual workman lost control of the intermediate process; his tools were replaced by the machine, his domestic workshop gave way to the factory. As a consequence of the centralization of the industrial process, the individual became of minor consequence.

On the other hand, there is now being offered to the public a variety of devices which again virtually place the production of certain goods and services in the hands of the individual. The railroad and the steam locomotive led to the disappearance of the individual furnishing his carriage or stagecoach: the advent of the automobile has reversed the process. The electrical refrigerator and, to a somewhat lesser extent, the mechanical washing machine serve to transfer tasks from mass production to individual production, and to bring back machinery from the factory to the home.

Hand in hand with these developments, there came also a change in credit arrangements. When the employer in the industrial revolution needed to introduce expensive machinery, the practice arose of securing the capital through credit and of paying for the machinery out of current income. This was accomplished by the accounting practice of setting aside an amount sufficient to cover interest and depreciation, and in order to provide the necessary funds there came a development of corporate organization and of modern banking.

In the same way, just as the new arrangements under the industrial revolution were calculated to aid the producer, so the modern change is intended to aid the consumer. Instalment credit must therefore be regarded primarily as making it possible for consumers to increase that satisfaction of their wants which is rendered by certain forms of modern durable goods. Instalment credit, so far as the consumer is concerned, thus places durable goods on a par with ephemeral goods through the process of extending credit on a part of the value. Just as the newer forms of producers' credit played a significant rôle in the earlier progress of society, so the newer form of consumers' credit known as instalment selling is playing an important rôle in the modern advance of society. In the one case, we have an increase of money incomes which gradually percolate throughout the community; in the other case, we have an increase of individual satisfactions with a similar diffusion to society as a whole. Here again, as in a previous chapter, we see the essential similarity between production and consumption, the essential analogy between production credit and consumption credit.

4. Are Consumers' Judgments Irrational or Distorted?

When we consider the relative importance to the consumer of present and future satisfactions, we are confronted by some peculiar difficulties. One of the ordinary criticisms against instalment selling is that the consumer obligates himself to buy what he soon finds that he does not want. The instalment buyer not only compares the utilities offered by the particular article at the present time with the utilities offered by other articles; but he also looks to the future and makes analogous estimates for periods subsequent to his purchase, thus covering situations which he is at present

unable to foresee. The conditions which he now anticipates may be altered; and the alterations may affect either the future desirability of the good that has been purchased or his future want for other goods. It is possible, therefore, that the arrangement into which the consumer has entered for the purpose of increasing his satisfactions may result in a net diminution of his satisfactions.

To what proportion of instalment purchases does this

TABLE XXIV

SUMMARY OF ANSWERS FROM OREGON INSTALMENT PURCHASERS TO A QUESTIONNAIRE SENT OUT BY THE UNIVERSITY OF OREGON

Article Purchased	Per Cent Number of Articles Purchased to Total Number of 761 Buyers
Automobile	54 6
Furniture	46
Piano	34 7
Phonograph	23
Washing machine	22.6
Stove	22 1
Vacuum cleaner	16 5
Clothing	13 8
Books	13 1
Sewing machine	10 7
Rugs	9 3
Radio	6 8
Farm machinery	5 4
Jewelry	3 8
Cream separator	3.7
Typewriter	3.1
Musical instrument	2 9
Groceries	1 8
Dry goods	1 8
Electric ironer	1 7
Magazines	1.4
Fuel	.4
Live stock	1
Miscellaneous	9 2

unfortunate experience apply? We all know individuals who, after buying goods on instalments, have later concluded that it was unwise for them to do so. But how large a percentage of the whole is formed by these dissatisfied instalment purchasers?

Only one investigation—and that a very partial one—has been made to secure such data.

The Oregon School[1] secured answers to 2,105 questionnaires which it sent out to instalment purchasers in the state. The kinds of merchandise which were actually purchased by the consumer on the instalment plan are stated in Table XXIV.

Here it will be seen that automobiles occupy the first place, that pianos are not far inferior, that washing machines are only half as important as furniture, and that clothing occupies a considerably higher place than does jewelry.

Of perhaps greater interest are the answers given by the purchasers as to the merits or the disadvantages of the plan.[2] Those that found the plan beneficial gave

[1] *Study of Instalment Plan Buying.* Bureau of Business Research, School of Administration, University of Oregon. Portland, 1926.

[2] It may be of interest to include the comments by the various consumers. These comments, it will be seen, range practically over the entire field:

A. Remarks made by those in favor of the instalment plan of buying.

1. It helps the man on a small salary to raise his standards of living by buying more of the comforts of life.
2. A boon to those out of funds.
3. It is fair to those who pay cash because they get a discount.
4. Things bought on this plan cost no more.
5. Price is so little more than cash that it pays to buy on the instalment plan and lend your money now.
6. We like to buy on the instalment plan because the business firm is always ready to fix the article bought if it is not paid for and is not O.K.

B. Remarks made by those flatly opposed to instalment plan buying.

1. Instalment plan buying is ruining the home and the nation.
2. Instalment plan buying of merchandise should be prohibited by law—the slavery of the Civil War days is not in it with the present time.
3. The worst thing that has happened to the working class.
4. Is being forced on many that do not want it.

the various reasons which are described in the table below, with the relative percentage of the whole number of answers to the questionnaires. The figures in the first column represent the number of replies to each particular question.

TABLE XXV

SUMMARY OF REASONS GIVEN BY OREGON INSTALMENT PURCHASERS IN FAVOR OF THE INSTALMENT PLAN

Reasons	Number of Replies	Total Percentage
Makes paying easy	991	47.1
Encourages thrift by saving to meet payments	876	41.6
Can enjoy product while paying for it	847	40
More convenient	726	34 5
Permits more people to be employed	466	22.1
Can enjoy greater luxury	346	16.4
Helps to keep up appearances	338	16.1
Satisfies the family	313	14.9

Those that found disadvantages in the plan gave the reasons that are seen in the following table:

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5. Is an aid to high-pressure selling.
6. Those paying cash suffer from the plan.
7. Costs a lot more.
8. Sets up false standards of living that the average man cannot keep up with.
9. Unsound because it is a form of speculation on part of purchaser.
10. Most people will make their automobile payments and make the merchant wait for his payments for their groceries and clothing.

C. Remarks by those who favor the plan in certain circumstances.

1. Instalment plan buying is all right for necessities but not for luxuries. (This remark was made by 92 persons.)
2. Success of the plan depends entirely upon the person using it.
3. It is all right for a man with a steady income.
4. Plan is all right if article purchased is used in business or to make more money.
5. All right for articles of a substantial price.
6. Plan is all right if substantial first payment is made.
7. All right if credit standing of individual is investigated.
8. The plan is all right if people are educated up to it.
9. Every home should be run on a budget and allow a certain amount to be used as an instalment on some article most desired.

TABLE XXVI

SUMMARY OF REASONS GIVEN BY OREGON INSTALMENT PURCHASERS AGAINST THE INSTALMENT PLAN

Reasons	Number of Replies	Total Percentage
Encourages running into debt	1,463	69.5
Leads to extravagance	1,331	63.2
Failure to pay instalments means loss of article and past payments too	1,167	55.4
Cost is much greater	1,034	49.1
Always bothered with small bills	864	41
Payments last longer than article	711	33.8
Not fair to those who pay cash	579	27.5
Lower quality goods sold on instalment plan	475	22.6

The conclusions of the Oregon survey, it will be seen, are partial and fragmentary. Moreover, they are of relatively minor importance. In the first place, what are listed are opinions, not experiences; and many of these opinions are of negligible weight. But, secondly, from the point of view of the isolated customer, the particular reaction is of little consequence. His view of the matter is peculiar to him, and the experience of other individuals is of significance only in so far as it causes him to reconsider the valuation which he places upon the particular goods. It is indeed true that these other individuals have entered into an arrangement similar to that which he is contemplating, and that they may have met with altered circumstances which lead them to regret the transaction. This consideration may deter him from making the contemplated arrangement as readily as would otherwise be the case; but after all the points have been considered, he is likely to decide the matter from his own point of view. The subjective feelings of other individuals cannot well be compared with his own.

The problem then is still unsolved as to how far the

consumer in general makes a correct appraisal of the situation. There are several factors which may possibly prevent such a correct appraisal, and which may therefore detract from what would otherwise be the benefits to the consumer by leading to a distortion of judgment on his part. These hindrances may be discussed under the three heads of irrationality, unfamiliarity and deception.

In the first place, is instalment credit accompanied by special dangers because consumers are irrational? It is frequently claimed that this is a characteristic which distinguishes consumers from producers; and that the irrationality of the individual consumers not only makes them undesirable as credit risks, but also jeopardizes their own welfare as well.

The distinction between producers in the sense of business men and consumers as a class, or between the same individual now acting as a producer and now as a consumer, is no doubt in part valid. The producer is accustomed, as the result of a long competitive process, to practice a more accurate accounting, a closer calculation, and greater care in his application for credit. A more exact appraisal of the situation would ordinarily be expected on the part of the producer, because his anticipated income is estimated in pecuniary returns as over against the more intangible quantities of future enjoyments on the part of the consumer. Consumers as a class undoubtedly do not possess the same skill in financial arrangements, nor practice the same careful budgetary methods as producers or business men as a class. Consequently, expectations and results will probably coincide more often in the case of production transactions than in the case of consumption transactions.

There are, however, two points that are pertinent here. In the first place, is it fair to put consumers into

an entire class by themselves? Is it not rather more consonant with the facts of every-day life to classify consumers into categories according to their income scale? In our account of the low-grade instalment business, we found that the abuses were rampant largely because the purchaser was such an "easy mark." The lower we descend in the scale of wealth, the smaller will be the degree of education and presumably, therefore, also of reasoning power. It is obviously to people in this category that reference is made in a recent popular article.[1] "In order to possess non-essentials, many families cut down on essentials, set a less nourishing table, buy fewer shoes, and skimp on living quarters. The family that runs a car and yet cannot afford to install a bathroom may be found in every town." This situation is more or less familiar to all of us. Even here, however, we must remember that these individuals form the exception rather than the rule; that even where this is not the case, it is of questionable propriety, as we have learned above, to dictate to the individual consumer as to his choice between so-called luxuries and necessities.

On the other hand, the higher we ascend in the scale of wealth, the more probable is it that the consumer will be an individual who participates in, or at all events is acquainted with, the ordinary business of life. Notable exceptions, indeed, may be found in both the lower and the higher grades. A poor man may be a shrewd man, and a rich woman may be a foolish woman; but, as a general rule, the rationality of the consumer may be expected, if not to keep pace with the amount of his income, at all events to be somewhat more pronounced as the result of the superior advantages of education and surroundings usually enjoyed

[1] Arthur Pound. "The Land of Dignified Credit." *The Atlantic Monthly*, February, 1926, p. 258.

by the wealthier classes. Inasmuch as modern instalment buying affects, as we have seen, primarily the more durable and the higher-priced goods, they will naturally be purchased by consumers in the higher income class. The problem of the automobile, therefore, is a different one from that of cheap jewelry: the problem of electrical washers and ironers is a different one from that of cheap furniture. The rationality of the consumer depends largely upon the kind of article which he buys and upon the income class to which he belongs. Irrationality cannot well be predicated of consumers in general.

In the second place, we are confronted by the question as to whether instalment credit does not itself tend to rationalize spending and thus to exert a beneficial influence even upon the irrational. It is undoubtedly true that in many instances the instalment plan induces the consumer to look ahead with greater care and to plan his economic program with a higher degree of intelligence. Many persons who would otherwise give little or no thought to the planning of future receipts and expenditures are virtually compelled by instalment buying to construct what is in effect a personal budget. If they are confronted by the necessity of being prepared to meet instalment payments in the future, they will be likely to give at least some little attention to the future. The mere fact of the obligation to meet a future liability tends to engender more accurate valuations and to create more intelligent judgments in reference to the program as a whole. The first venture may be an unfortunate one, but the experience which has been so dearly purchased will probably be utilized the next time. Just as the use of banks and of other modern credit devices has educated the producer to a high point of efficiency, so in the same way instalment credit may

serve as an engine of education to the consumer in a better adjustment of the present to the future.

So far, therefore, as it relates to the element of irrational conduct, the objection seems to be one of minor importance, especially so far as concerns the automobile and similar products.

The second consideration is that of unfamiliarity on the part of the consumer. This may be of a double kind: the consumer may be unfamiliar either with the article, or with the practice of instalment selling. Unfamiliarity of the former kind is really not germane to the issue: if the experience with the article leads the purchaser to regret his decision, the objection would be equally true whether he paid in cash or bought on credit with the obligation to pay a lump sum. Unfamiliarity, on the other hand, with the practice of making periodic payments has doubtless brought not a few purchasers to grief. But, as we intimated in the preceding paragraph, this evil is likely to bring its own remedy with it. To the degree that instalment selling continues to be practiced, the unfamiliarity will disappear. The objection, therefore, if it possesses any validity, will lose its force with the passage of time.

We come, finally, to deception or similar practices indulged in by the dealer. We shall in the next chapter discuss more in detail the problem of costs, and shall see that the actual finance charges have not infrequently been concealed. It goes without saying that when a purchaser fails to learn the true cost of a service, he is handicapped in his efforts to judge of the desirability of the transaction. But here again, while the novelty of instalment selling has no doubt permitted or even encouraged the concealment of finance charges, longer experience with the plan and the endeavors of the larger finance companies to make known the exact

costs of finance will probably result in the education of the consumer.

The same may be said as to the charge frequently brought against instalment credit to the effect that the dealer is so anxious to push sales that he will induce the consumer to undertake obligations for which he is not fitted. This argument has perhaps been most forcibly presented in the criticism urged by the officers of the International Typographical Union: "Good wages and healthful working conditions cannot greatly add to the wage-earner's happiness if he persists in getting into debt. The root of the evil is the tremendous growth of the credit business, which in the last decade has raised a need of defense against the high-pressured type of salesman. . . . Insinuating salesmen trained in selling-psychology and in 'credit desire,' abetted by wives jealous of neighbors' displays, are constantly waiting to take the breadwinner in a weak moment and unload something on him."

The same idea is found in Mr. Pound's article on the subject.[1]

> I have quizzed many employers as to the effect of instalment buying on their employees. Only one could be found who gave whole-hearted approval. The others expressed various shades of disapproval and for various reasons. I was told of the poor devil who has to borrow money from his boss each week because he has over-bought on contract goods. Also every town seems to have at least one unfortunate whose sales resistance is so low that his contracts total more than his earning power for the next year.

Here again, we must distinguish between the low-grade and the high-grade business. What is largely true of cheap furniture and cheap jewelry does not apply in the same degree to the automobile. And while these easy-payment practices are still to be found, as is undoubtedly the case even in the automobile

[1] Pound, *op. cit.*, p. 260.

business, the most recent tendencies are in the other direction. Mr. Pound puts the case attractively when he writes: "Into their decalogues for salesmen our best business houses have written this phrase: 'Thou shalt not over-sell the dealer.' When the words, 'or consumer,' are added thereto and the amended sentence is accepted by the responsible business community, all will be well in this Land of Dignified Credit for the Masses."

This is precisely what is now taking place. The development of large finance companies, and especially of institutions like the new discount corporation, is in the direction of enforcing saner and more conservative practices.

From this point of view it will be interesting to note the efforts that have been made by one of the large finance companies to promote an appreciation of saner and more conservative methods.[1] In the summer of 1926 this company offered a series of prizes for the best articles or typical sales canvasses by salesmen, based among other things upon the following consideration: "Why should a purchaser make the largest down payment possible, and pay the balance in as few payments as he can?" The contributions that were awarded prizes have recently been published, and we print herewith part of the contribution which was awarded the first prize:

The prospect should make the largest down payment possible, and pay the balance in as few payments as he can:

1. *Because* it makes the car more nearly his *in fact;*
2. *Because* it leaves a minimum of financial burden to be carried after purchase and actual possession;
3. *Because* it saves carrying charges, interest, etc., thereby making the original cost and the total investment less;

4. *Because* it reduces the possibility of failure to pay and loss of the car through possible repossession;
5. *Because* it gives pride of true possession, and real ownership, in a greater measure;
6. *Because* a man often takes good care of his car in direct ratio to his proportion of ownership therein;
7. *Because* the old-fashioned idea of pay as you go, at least as far as you can, is still a sound basic theory;
8. *Because* it makes for greater mental freedom to enjoy full use of the car;
9. *Because* it leaves him free, sooner to set up or create a fund to offset depreciation on his purchase, which commences immediately when the car hits the road;
10. *Because* each deal consummated tending toward reduction of long term credits is a step in the right direction, economically,for the purchaser, the dealer, the manufacturer, and in fact for the entire country.

The finance companies, in other words, are learning to protect the consumer against himself as well as against the abuses sometimes still practiced by the dealers.

5. The Influence on Savings

The final problem with reference to the consumer is the effect of instalment selling on savings. This is of still more immediate importance to the community as a whole, because in the ultimate analysis the economic progress of society depends upon the accumulation of capital.

A distinction must, of course, be made between the savings of the individual and the savings of the group. The savings of the individual may take the form of any instrument or security that entitles him to wealth; the savings of the group include only the actual tangible wealth itself. An individual may put his savings into the form of a first mortgage on land; from the point of view of the community, the increase of mortgages does not imply an increase of social wealth. The

savings of society must embody themselves in the actual tangible wealth that is accumulated for future use.

The figures of savings banks deposits are often cited as proof of the beneficial effect of instalment credit. They may be presented in the following table.[1]

TABLE XXVII

SUMMARY SHOWING YEARLY INCREASE IN NUMBER OF SAVINGS BANK DEPOSITORS

Year	Number of Banks	Number of Depositors	Amount of Deposits in Dollars
1840	61	78,701	14,051,520
1850	108	251,354	43,431,130
1860	278	693,870	149,277,504
1870	517	1,630,846	549,874,358
1880	629	2,335,582	819,106,973
1890	921	4,258,893	1,524,844,506
1900	1,002	6,107,083	2,449,547,885
1910	1,759	9,142,908	4,070,486,246
1920	1,707	11,427,566	6,536,470,000
1921	1,601	10,737,843	6,018,258,000
1922	1,685	12,538,997	7,181,248,000
1923	1,647	13,340,333	7,897,909,000
1924	1,603	13,971,793	8,439,855,000
1925	1,683	14,640,000	9,065,181,000

As a matter of fact, however, these figures are really of slight importance. In the first place, while they disclose the growth in savings banks deposits they tell us nothing about other forms of savings embodied in balances in the banks, investments in securities, or in analogous forms of wealth. Changes in industrial and financial conditions affect the amount of savings that flow through any one particular channel. The heaviest borrower at a bank may have the largest favorable balance on the ledger, i.e., may be the largest depositor. It is conceivable that the increase in savings banks deposits may be more than offset by the decrease in other forms of savings.

[1] *Report of the Comptroller of the Currency*, 1925.

The second criticism of the inferences that are usually drawn in the matter is that there is no connection shown by the figures between instalment selling and savings. To work out a proper correlation between the two would require a far more extended series of figures than that afforded by savings banks deposits alone. All that can be said is that for the past decade instalment selling and general prosperity have increased together. This general statement, however, tells us nothing as to which is effect and which is cause, nor does it throw any light on the particular forms which have been assumed by the savings of society as a whole. The figures are satisfactory, indeed, in so far as they show that instalment selling has not interfered with savings bank deposits to the extent of preventing an increase; but more than that they do not prove.

Inasmuch, therefore, as the data for inductive studies are not yet in existence, we must limit ourselves to a discussion of the connection between instalment selling and the savings of the individual.

If then we ask in what way the savings of the individual be affected by instalment selling, we must remember that, inasmuch as savings represent a part of income, the amount saved may be affected either by changes in the income itself or by changes in the percentage of income which an individual will reserve for future use. The latter depends upon the rate at which he discounts the future. In other words, the individual will always compare the attractiveness of goods which offer satisfactions in the present with that of goods which will offer satisfactions in the future. If the advent of commodities offering new opportunities for expenditure of income in the present seems to be of major importance, the utilization of the wealth in question may be so advanced that it occurs immediately after the income is earned, simultaneously with the

earning, or even before the receipt of the pay envelope. In all these cases, we must remember that, from the consumer's point of view what it is important to consider is not the time of spending, but the time of utilization: for income employed to purchase at one time a good which is not used until a future date is really "saved" income. To the extent that the instalment selling offers at least the opportunity of so advancing utilization, it no doubt exerts some influence on savings in that particular sense.

Of greater significance, however, is the effect of instalment buying upon the magnitude of the incomes. In other words, the question is: does instalment selling encourage or discourage effort? Is instalment credit thrift or spendthrift?

We are told that instalment credit connotes slavery. Whenever an individual unwittingly or carelessly assumes more obligations than he is really able to meet, the load may become a crushing one. If the indebtedness becomes more or less protracted, the reaction is apt to be bad.

The situation is not so far different from that which has been made familiar to us by many episodes in history. Improvident borrowing has always caused trouble, and slavery for debt has been well-nigh as common as slavery by conquest. Even today, where there is little actual bodily slavery, the conditions as we find them in some parts of the Southern states approach perilously close to the condition of peonage as it still exists in belated countries. A man with a millstone of indebtedness about his neck is not apt to make much progress in the fierce competitive current of modern life: a family water-logged by debt is likely to sink.

It must be remembered, however, that this is nothing essentially new. It applies not so much to instalment credit as to consumption credit as a whole. In fact, it

applies not alone to consumption credit but to production credit as well. The foolish and improvident borrower, whether for consumption or for production purposes, always invites trouble; and where the trouble is sufficiently accentuated, it may result in discouragement and virtual slavery. But because this is a possible attendant phenomenon of credit, shall we object to all credit? Because some individuals or even some classes are so improvident as to allow themselves to be caught in the maelstrom of discouragement, shall we say that this represents a true picture of credit, whether in the form of instalment selling or of any other variety?

Is there not another and a truer side to the picture? If the commodity is in itself a desirable one, and if the individual would be inconvenienced or have his productive efficiency diminished by his inability to purchase the commodity for cash, will not instalment selling augment both his capacity and his desire to save in order to pay for it? While indebtedness is to some an incubus, it is to others a discipline. There are, in fact, two aspects of this influence of instalment credit upon savings. The one has to do with the individual's desire to save, the other with his capacity to save.

As regards the desire to save, does not the mere possession of something which has long been wanted, but which it has been impossible hitherto to acquire, often tend to transmute the attitude of the individual? If a man has a chance to secure through instalment purchase a home of his own, will not the mere prospect of ultimate ownership lead to redoubled exertion on his part? How else are we to explain the phenomenal success of building and loan associations? And if this is true of the home, is it not also true of the furniture for the home? Ought the experiences that are still unfortunately to be found in the low-grade furniture business to blind us to the advantages of the high-

grade business? And if the prospect will make a man work harder in order to own his home or his furniture, will he not be apt to do the same for other durable commodities like the automobile? Does instalment selling in the building and loan associations mean slavery; or does it, on the contrary, spell liberation for the individual? Ought the purchaser of the automobile to be compared with the improvident negro farmer who puts himself hopelessly into debt with the cross-roads merchant; or shall he be compared rather with the forward-looking individual who is courageous enough to marry even on a small income because he knows that his newly-found happiness will cause him to work harder in the future? To the extent that the instalment purchase of a durable commodity which is worth having stimulates the possessor to renewed and increased exertion, it acts as an encouragement, and not as a discouragement, to savings.

There is, however, another and still more important side to this subject. We come, in other words, to deal not so much with the desire to save as with the capacity to save. Does instalment selling actually augment the income, a part of which may be devoted to increased saving? Here, again, it is obvious that where the article is used for productive purposes in the sense of increasing the money income of the individual, there can be no question as to the consequence. If the taxicab is bought by the operator or the truck by the contractor, the vehicle yields from the start an income which would otherwise not exist at all. Credit of this kind is, as we have seen, really production credit and not consumption credit. As it is with the ordinary business man who borrows money because he expects with its aid to earn enough not only to pay the interest on the loan, but also to secure a margin of profit for himself, so it is with the purchaser who applies the

system of instalment credit to income-yielding pieces of capital: both are in precisely the same category. The commodity itself produces income, part of which is utilized by the individual to make his instalment payments, precisely as the business man provides for the interest and amortization of the loan.

But what is true of money incomes is true also of other incomes. If we revert to our preceding analysis, we remember that consumption is in a wider sense not the opposite of production. We have seen that there may be a positive utilization of wealth as well as a neutral or wasteful or destructive utilization. If the augmented satisfactions of a purely psychical nature, conferred upon an individual by the acquisition of a commodity, would otherwise not have existed, is it not entirely possible—nay, even likely—that these augmented satisfactions will be brought into such relations with his productive capacity as to increase his efficiency, and will not the psychic income in this way be after all transmuted into a money income? In other words, will not the possession of the durable commodity actually increase the ability of the individual to make renewed and augmented exertions?

Thus from both points of view, that of desire to work and that of capacity to work, instalment selling, when used with the right kind of commodity, is likely to increase and not to decrease savings. If instalment selling leads the individual to buy something which he does not really need, or which satisfies only a passing whim, or which transcends his real prospective capacity to pay, the action must be put into the spendthrift class. But if the commodity is in itself a useful and desirable one, if the individual would be inconvenienced or would have his productive efficiency diminished by his inability to purchase it for cash, instalment selling will tend to augment both his desire and his capacity to save in order to pay for it.

CHAPTER XIII

THE EFFECTS ON BUSINESS CONDITIONS

We have thus far considered the effects of instalment credit upon the consumer as an individual, and have sought to call attention to the points in which the practice affects him as an individual. We now proceed to discuss the wider problem of the effect of instalment credit upon the business structure of the community. By the business structure we do not understand simply the narrow field of business profits or losses in the sense of the profits or losses of the merchant and manufacturer. By business life we mean economic life in general, that is, the activity of all classes who get busy in making a living for themselves. We have to consider the welfare of the wage-earner and of the farmer as well as of those who are sometimes more narrowly described as business men. The aim of this chapter is therefore more broadly to consider instalment selling from the point of view of its influence on values in general.

All values are the resultant of two forces; those which affect demand and those which affect supply. It is a commonplace of economic theory, as well as of business practice, that all the problems of both individual and social prosperity revolve about relations of demand and supply. Taking for granted an acquaintance with the general character of those interrelations, let us proceed to study the influence of instalment credit first upon demand and then upon supply. Before we do this, however, let us recall the familiar distinction between the temporary equilibrium of the forces of demand and supply as reflected in the short-time or

market conditions, and the more permanent equilibrium of demand and supply, which is implicit in the term "normal price" as over against "market price."

The permanent equilibrium represents, under the changing conditions of actual life, only an ideal or a goal rather than an actuality. The distinction between the temporary and the permanent equilibrium of economic forces has been elsewhere described as follows:[1]

> Static normal value is like the level of a pond; we can study it only on the assumption that there is no motion of any kind. Dynamic normal value is like the level of an ocean bay where the tide ebbs and flows and the level is slowly changing. Market value is like the surface when agitated by the winds; the winds are now above, now below the surface; yet as long as the winds persist, we never see the glassy surface of normal price. . . . To ascertain the laws of value we must not only study the forces that produce the higgling of the market,—that is, the winds that disturb the surface; we must also study the forces which change the level of the price,—that is, the strength of the tidal current and the conformation of the shores; we must finally study the causes of the original level itself—that is, the source of the supply, the volume of the water, and the depth of the bay.

Let us then proceed to attack the problem from the points of view of both the temporary and the permanent equilibrium between demand and supply, and begin by considering the effect of instalment selling upon demand.

1. Influence on Demand

A wide-spread opinion is to the effect that all of the supposedly larger influences of instalment credit upon the economic life of the community are ostensible rather than real, because instalment selling affects only the temporary equilibrium. Instalment selling, it is said, does not increase the demand for the commodity, but simply advances the time when the demand becomes effective: it cannot result in any general increase in

[1] Seligman, *Principles of Economics*, eleventh edition, 1926, p. 256.

purchasing power, for the growth of present sales is certain to be offset by a decrease in future sales. The author of a widely read article advances an elaborate argument describing the various happenings to a community of a given size.[1] He points out that while, through the device of instalment credit, there may be a decided expansion in the demand, the necessary result is that in the succeeding years, when the temporary spurt is over, there will be a corresponding decrease in the demand until the normal conditions are again attained. "Juggle the figures in any way you like," he tells us, "change the people in each category, the time of the instalments, the proportions of each individual's income used for cash payments, the result must always be the same. Instalment selling is therefore really a drug; temporarily stimulating, it brings ultimate weakness."

Such is the indictment brought against instalment selling. That the argument, however, is erroneous can easily be shown. In fact, there are two considerations that must be borne in mind.

The argument rests on the assumption that the income of each member of the community remains constant from year to year and that, accordingly, there can be no increase in the general fund available for purchasing power. But can there be any increase in production called for by this temporary increase of purchasing power, as a result of instalment credit, without affecting the incomes of the individuals? Is it not a fact that in the long run, at least, production and purchasing power are correlated? In a reply[2] by Dr. Alvin Johnson to the article in question, this point is well put as follows:

> The principle involved is that instalment buying, if sufficiently general, clears itself. There is an equivalent item of income for

[1] "Where Instalment Buying Breaks." *The New Republic,* April 7, 1926.

[2] Printed in *The New Republic,* April 28, 1926.

every item of obligation in society at large. When the form of credit transactions is cleared, the net economic effect remaining is an important addition to the goods at the command of society created by resources that would not have been so fully utilized if instalment buying had not existed.

This conclusion is perhaps expressed a little too broadly in that it does not adequately distinguish between the temporary and the permanent conditions. Dr. Johnson himself later calls attention to the fact that, in the short run at least, an increase in output does not always mean an increase in purchasing power, and that business cycles with their recurring periods of depression are due to this dislocation of supply and demand. But it is obviously erroneous to deny the influence of even a temporary demand upon production and its correlative purchasing power. The supply of one thing constitutes the demand for something else. If, therefore, we supply the right thing, the increase in productive power will find its own market.

It is at this stage that an interesting point has been advanced by Professor J. M. Clark.[1] He points out that there is often a critical stage in the process, when a large productive power has not yet found its market and when the potential desire for goods has not yet been translated into an effective demand. He adds:

Perhaps it can not be so translated until the product is actually made and the resulting costs and profits distributed to the participants, and this can not happen until a considerable part of the goods are sold and the earnings realized by the producers; and thus a deadlock exists. It seems probable that instalment buying can help an industry over this deadlock and facilitate the complex adjustments whereby sudden and large increases in productive power become converted into actual realized products, turning back its income to swell the flow of effective demand for goods.

[1] John Maurice Clark, "Control of Trade Practices by Competitive and Other Forces." *Proceedings of the Academy of Political Science of New York*, January, 1927.

Professor Clark, indeed, adds a warning:

> This is a doctrine to be accepted tentatively and with much caution. It sounds like proving that all we have to do to get rich is to spend money that we do not possess with the result that there is more money for every one to spend. This is too good to be true as a universal rule, and the utmost that a skeptical economist should be ready to concede at present is that there may be conditions of transition under which the magic will work.

Even if, however, we accept the above analysis only tentatively, there is another and more compelling argument to show the fallacy of those who deny the permanent influence of instalment selling on demand. The weakness in their argument is the failure to recognize that there can be any stimulus to the productivity of the individual as a result of his acquisition of the commodity. We revert, in other words, to the points that have been advanced in the preceding book—the fact that consumption may mean a productive utilization and that it may thus modify the income flow to the individual. If instalment credit is a part of consumption credit, and if consumption credit is a part of credit in general, what reason is there for denying to instalment credit some of the characteristics that we must ascribe to all credit? What is there, in other words, about instalment credit that deprives it of the benefits which attach to credit as a whole? If credit to the producer normally increases his productive capacity, why should not credit to the consumer normally increase his consumptive capacity, that is, his purchasing power? As a matter of fact, we have seen that instalment credit possesses certain advantages of its own as contrasted with other forms of consumption credit like open-account credit. If, through the use of the fractional-payment device—the essential element in instalment credit—, consumption goods which in the long run minister to the efficiency of the individual are made avail-

able to some who would not otherwise be able to obtain them, how can it be denied that we are here dealing with a productive utilization of wealth? The fact that instalment credit puts such potentially productive goods at the disposal of the consumer at an earlier date than would otherwise have been possible implies an increase of his efficiency which will soon be translated into an increasing flow of income. Instalment credit, in other words, does not simply advance purchasing power; it may augment purchasing power.

2. Costs of Instalment Credit

Another common argument against instalment selling is to the effect that the game is not worth the candle. The costs of instalment selling, so it is claimed, are so excessive and take so large a proportion of the income available for consumption as substantially to reduce the purchasing power of the individual. In the long run, so it is claimed, instalment credit costs more than it is worth, and thus operates to diminish the demand of the community, so that the profits of the finance companies are dearly purchased at the expense of general social welfare.

This is a serious charge and deserves fuller consideration.

In approaching the subject, it is important, in the first place, to distinguish between normal and abnormal conditions. In ordinary business transactions, we find all kinds of possibilities in prices. Some prices are low, some are high; some prices are reasonable, some are exorbitant. In the wide field of actual life, the forces of competition and substitution operate to bring about a satisfactory adjustment between values and costs. In the long run, consumers will not pay more for commodities than they are worth: if the costs do not warrant the sacrifice, there will be no market for them. Again,

under conditions of free competition, with all that those words imply, exorbitant profits, in the absence of special or evanescent conditions, are likely to disappear.

With the advent, however, of instalment selling, the problem is somewhat more complicated. The situation is too novel to have permitted of its settling-down into a normal condition. Competition among finance companies is indeed keen, but the practices are not yet entirely stabilized. That finance charges are sometimes excessive is undoubted. But the problem to be discussed here is whether this is a necessary condition of instalment credit or whether on the contrary the situation is not curing itself. The real costs of instalment selling are not those represented by the "pure interest" charge for the use of the capital during the interval between the down payment and the final payments, nor are they represented by the so-called differentials which are often included in the finance charge for the various forms of insurance. The real costs to the community are to be sought in the extra exertions of human beings and their contrivances and institutions which are added to the costs of producing the commodity when sold for cash.

In estimating these costs, however, we must be mindful of two considerations. One is the lessening of cost which has accompanied the existing scale of production, itself made possible through the greater market opened up by instalment selling. The other is the fact that while the benefits of lower price accrue to all purchasers, the cost of instalment credit is presumably borne by those who buy on the instalment plan. In this respect, indeed, instalment credit may be contrasted with open book-account credit, when the costs of the service are presumably distributed over the whole field—including those who purchase for cash as well as on credit.

In the case of automobiles, to mention all the items included in the so-called finance charge would not be easy. The interest outlay constitutes only a part of the total cost of financing instalment sales. The finance company must include expenses for other items, such as insurance, credit analysis, collections, management, losses, etc. To this list the non-recourse company must add the cost of repossessing, reconditioning and reselling cars. Both the recourse and the non-recourse methods might also include those expenses which find their origin in the attempt to put easy and convenient credit facilities at the disposal of any would-be purchaser. When we survey the list of services which the customer enjoys, it is clear that he really obtains more than a strict credit accommodation. Yet the attempt is frequently made to express the total finance charge as bank interest, despite the fact that some of the items may be divorced from any connection with the lending of money. A case in point is that of insurance, which is commonly included in the stated rates in order that the finance company may be protected but which in reality should not be deemed a finance charge. In the past, however, finance companies, by stating the finance rate as a percentage of the selling price of the article or of the amount financed, have frequently left the impression that the finance rates are comparable with bank interest. This practice is misleading in that it serves to distract the attention from the cost items other than the charge for the use of money.

It has been misleading in another respect also. In the attempt to make their rates compare favorably with the usual bank interest a number of the finance companies have resorted to the plan of stating their rates in the form of "interest," but in a way that does not reveal the "true interest" as the purchaser is accustomed to figure it on an amount-per-annum basis. The possi-

bility of disguising the true costs is greater, indeed, in instalment credit than in ordinary bank credit, because of the comparatively slight addition to the price in each particular transaction. In commercial life a change in the rate of discount of only one-half of one per cent is quite adequate to effect results because of the magnitude of the transactions involved. But, in the case of the automobile sold on the instalment method, a difference between six per cent and twenty per cent in the finance charges may make a difference of only a very few dollars in the total price. It will, therefore, probably, be overlooked by the average purchaser who is unable to distinguish the difference in the finance charges from the other differences in the relative desirability of the cars concerned. It is because the total cost of instalment selling is divided into such a multiplicity of relatively small transactions that the true cost is not always immediately realized.

Among the methods of disguising the finance charge, several are worth mention. One way is to charge interest on the cash price of the car, even though one-third may be paid down on the purchase.

Another method is to attempt to conceal the insurance charge. In a few cases the finance charge includes the insurance charge. Again, the so-called finance charge is separated from the insurance charges which are then termed differential charges. If the insurance charge is included at a flat rate for the entire territory, the statement of differentials is obviously more straightforward, because the insurance charges on cars of the same value vary as much as 300 per cent in the different districts. Under the flat-rate method, some purchasers are clearly paying for others.

Some finance companies not infrequently charge rates of considerably varying amount in different sections. This may be due to the intensity of the competition in

the different districts, to the variation of the credit risks in the different districts, to the variation of insurance differentials, or to any one of a number of other variables. Whether these charges are defensible is open to question. The finance companies that succeed in the competitive struggle are probably able to do so because they pursue more conservative and therefore more safe financing methods; while the companies which vary their rates must accumulate in one part of the country a reserve fund sufficiently high to cover the losses in those parts of the country where they have been compelled by competition to give lower rates. Or again it may happen that they are making exorbitant profits in one section of the country, because the competition there has not yet become sufficiently keen. On the other hand, if the variation in rate is due to a difference in credit risks, then in theory, at least, the finance companies are extending credit in some regions where the danger of over-extension is already realized. The preferable method would obviously be more careful credit examinations rather than higher rates.

The most common method of disguising the finance charge is to quote the finance charge as an interest payment on the unpaid balance when, as an actual fact, there may be a considerable discrepancy between the quoted interest rate and the true rate, if figured on the basis of the actual time during which the money is outstanding. The discrepancy can be illustrated by the following example.

The interest charge may be quoted as 9 per cent on the unpaid balance of the sum due on the note. The note, in the case of the automobile, is outstanding for the period of 12 months which, of course, means that this is equivalent to about one-half of the sum in question that remains outstanding for the entire period. In order to ascertain the real cost of the sum actually

outstanding, it would be necessary to use a coefficient by which the stated rate should be multiplied in order to give the true cost.[1]

In order to illustrate some of the above statements, we take a few actual examples picked at random from the published rates. The names of the companies are for obvious reasons omitted.

The following example is from the transactions of a non-recourse company. The charge is made on unpaid balances. When the charge is for:

4 months, the rate is 5%
6 months, the rate is 6½%
8 months, the rate is 8%
10 months, the rate is 9½%
12 months, the rate is 11%

[1] Suppose, for instance, that the note is for 2 months. In order to obtain the coefficient, it would be necessary to multiply 12, which represents the number of months in the year, by 2, which represents the 2 months outstanding. This would then have to be divided by 3, since one of the payments has already been made at the end of the first month, and since therefore, one instalment was outstanding one month, and another 2 months, or both together 3 months. In other words, the coefficient would be arrived at by ascertaining the following fraction:

$$\frac{12 \times 2}{1 \times 3} = 8$$

Utilizing the same method for each successive period, we arrive at the following scale of coefficients:

2 months	....	8
3 "	....	6
4 "	....	4.8
5 "	....	4
6 "	....	3.428
7 "	....	3
8 "	....	2.666
9 "	....	2.4
10 "	....	2.181
11 "	....	2
12 "	....	1.846 or

$$\frac{(12 \times 12)}{(1+2+3+4+5+6+7+8+9+10+11+12)} = \frac{144}{78}$$

By using this coefficient, therefore, the discrepancy between the actual charge and the true cost will be apparent.

In addition to these rates, a differential is included to cover insurance charges.

Example:

Cash price, new car—$1650; down payment—$550; note outstanding—$1100; finance charge, $121 plus the insurance differential of $38.10 or a total of $159.10.

The rate on the pure finance charge figured on a yearly basis is 11 per cent, which, when corrected by the coefficient, or multiplied by 1.85, amounts to 20.35 per cent. The rate including the insurance differential and similarly corrected by the coefficient would be 26.7 per cent.

The same company has the following rates on used cars of the 1924, 1925 and 1926 models:

The stated finance charge is arrived at by adding 2½ per cent of the total selling price to the rates on new cars. Since the down payment on used cars is generally 40 per cent, the corrected annual charge on the pure finance rate, omitting the insurance differential, would be 27.9 per cent.

Another company states the following rates on used cars:

The down payment is 40 per cent; the charge is stated as 9½ per cent of the total selling price; time—10 months.

If the total time price is $1,000, we must subtract the $95, leaving the cash price $905. Of this 40 per cent is paid in cash. The note outstanding is therefore $543. The finance charges being $95, the actual charge corrected by the proper coefficient is 38.15 per cent, including insurance.

We may sum up the methods that are sometimes employed to obscure the real nature of the finance charges as follows:

(1) Figuring the finance charge before the down-payment is deducted

(2) Making no allowance for payments running for only a few months instead of for a full year, which is the ordinary basis for charging interest

(3) Giving no credit for the payments which from month to month reduce the sum on which the interest should be computed.

These practices are, of course, not confined to charges for automobile paper. As has been pointed out in a recent monograph, the same abuses are found in many other lines.[1] Thus when one of the oldest and best known sewing-machine companies says: "We simply discount 15 per cent from the list price for cash," the actual results would be as follows. Assuming that the time price is $100, and the cash value $85, and assuming the usual $10 down payment, we find that $75 is loaned for $15; that is, 20 per cent for an average of 5 months, (nine additional payments monthly as required) or an actual rate of 48 per cent. Finally, an established publishing house, which features technical and business books, has a cash discount which would make their instalment terms cost 84½ per cent.

On the other hand, many of the finance companies are adopting the plan of stating finance charges in a form which purports to give the total cost rather than to disclose the interest charge. Let us take as an example a transaction of one of the present-day leaders in the field of automobile financing.

The cash selling price of the car was $1,500; the down payment was $564; and the charge for financing the transaction on the basis of paying the balance in twelve monthly instalments was $84. The relevant figures would therefore be as follows:

[1] *Instalment Selling.* Published by the Marketing Division, Frank Seaman, Incorporated, New York, 1926, p. 11. For similar figures see report of the Federal Trade Commission on "House Furnishing Industries," Vol. III, 1925, p. 268.

(1) Cash delivered price	$1500
(2) Total financing charge	84
(3) Total time price; add (1) and (2)	1584
(4) Down payment	564
(5) Deferred balance	1020
(6) Actual unpaid balance of cash price	936

The $84 represents the price which the customer has to pay in order to obtain in the present what he does not pay for until the future. Under this method of stating the finance charges the purchaser obtains a much clearer idea of the actual cost of the financing than he would obtain if the charges were put in the form of percentages.

We may use this example in order to illustrate the impropriety of comparing the total finance charge (which includes a number of cost items), with a charge for the use of money. Of the $84 charge, $13.20 comprises the insurance premium on the car for a year. If the latter amount is subtracted from the total charge, there remains a sum of $70.80, which is equivalent to 7.56 per cent of the amount ($936) actually financed. If we choose to do so, we may further reduce this rate to a per-annum basis. The rate thus put in a form comparable to an interest charge, would be 13.9 per cent. But the comparability is one of form only, because this rate still includes the several items which enter into the finance charge. It cannot be considered, therefore, as a "pure interest" charge.

Where the charges are stated in the form of a lump sum, as was done in the transaction just described, the purchaser undoubtedly is in a better position to compare the costs with the benefits to be derived. In this instance he decides between the alternatives of paying a definite amount for the privilege of obtaining the commodity in the present, or of saving this outlay by postponing his purchase until the future. To the con-

sumer it is probably this comparison rather than the one between the per-annum rate and an interest rate which is usually of significance. The per-annum rate is of importance to the purchaser only when he is in a position to borrow elsewhere at a lower cost. It is evident, however, that this situation does not apply to the great majority of instalment buyers. Even though he can borrow at a stated rate lower than the one which he pays on the instalment credit, there are a number of other items which enter into the "real costs" of the credit obtained. The unwillingness of the purchaser either to execute a mortgage on his home or to ask a friend to endorse his note, and even the inconveniences and loss of time necessitated in obtaining bank credit, present barriers to its use—barriers that are as real as the higher charges made for instalment credit. Especially is this true when the purchaser is convinced that the higher rate includes services which he does not obtain when he borrows from the bank or from other sources.

However, while it is undoubtedly true that to the majority of purchasers it is the total cost rather than the per-annum rate which is of significance, the fact remains that many purchasers may advantageously resort to a larger proportion of cash payment or to a greater use of other forms of credit. In such cases a comparison with the "pure interest" charge might facilitate their decision. In certain instances it is probable that the instalment dealer himself might profit by emphasizing either the lump-sum costs or the "true interest" costs of the instalment credit and by encouraging the purchaser to use cash reserves or to resort to other forms of credit. But the dealer can afford to emphasize this fact only if he is sure that his charges compare favorably with those of his competitors. Even then, the uncertainty as to the results often leads

the average dealer to dwell on the advantages of the services included in the finance charges, and thus to stress the idea of instalment credit.

We observe, then, that there are two principal methods of stating the finance charges. The first is that of putting the rate in the form of percentages which are presumably comparable with bank interest, but which are often grossly misleading. They tend to mislead, first, because they should not be compared with charges for the use of money, and, second, because they are seldom reduced to a form which would make possible a correct comparison. Such a statement of charges is of service to the purchaser chiefly at the time when he makes a decision as to the form of credit to be employed. More essential, however, is a statement of the finance charges which will enable the average purchaser to come to a conclusion as to whether the costs outweigh the advantages; and for this purpose the statement of charges in a lump sum appears to be the more desirable form.

It is accordingly much to be desired that the stated finance charges should in every case be reduced to an actual correct percentage. Some of the more conservative companies already pursue this practice, and it is to be hoped that the new National Discount Corporation will exert its influence in the same direction. As for the future of finance charges, we may observe, without making any invidious comparisons, that the more successful finance companies are succeeding precisely because they give better service at lower rates. In the fierce competition that has been going on during the past few years, there has been a marked mortality in the case of the smaller finance companies. This mortality has been due in part to the laxer methods which have been pursued in the grant of credit with resulting repossessions; but it has also been due in part to the

loss of business consequent upon excessive finance charges.

The evil, therefore, so far as it represents a prevalent abuse, is tending to cure itself. Competition, which has in no slight measure engendered the abuse, is setting in motion forces which are likely to cure the abuse. The most successful of the existing large finance companies are those which make the lowest charges.

Thus, if we depend upon competition to reduce charges to a fair level, the problem is really not essentially different from the one that is involved in paying for the services of the ordinary banker. The only difference is that owing to the long continued existence of ordinary bank credit, the situation has been stabilized and the charges have become open and precise. From the economic point of view, therefore, the question is not as to the existence of the costs involved in the finance charges, but as to the worth-whileness of the costs. We must compare the costs with the returns. If the practice of instalment selling continues to approve itself to the consumer, it means that the cost more than pays for itself in ultimate satisfactions. He is apt to be mindful of the fact that if he pays little, he frequently gets little; and that the best service often means the highest-priced service. The criterion is not a positive, but a relative one. There may be an economy of high prices as there is an economy of high wages.

Our conclusion would therefore be that while there are still undoubtedly abuses in the finance charges, the situation is beginning to remedy itself; and that in proportion as conditions are becoming stabilized, the costs of instalment selling are tending to be more than counterbalanced by its advantages. If instalment selling is apt on the whole, as we have seen, to augment the purchasing power of the community, the costs represent an item on the debit side of the transaction

which is more than compensated by the items on the credit side. The net result is likely to be beneficial.

3. Influence on Production

There are certain advantages which have been claimed by enthusiastic advocates as to the influence of instalment selling on production, which it would seem to be difficult to substantiate, and which certainly cannot be proved by inductive reasoning. Thus, it is alleged that instalment selling in the automobile business is responsible for mass production, and therefore, as a consequence, for the lowering of price which has been going on continuously for the past few years. The difficulty in regard to this allegation is that there are many reasons which explain the phenomena in question, and that there is no way of segregating the special influence which has been exerted by instalment selling in achieving this result. Mass production is a characteristic of the entire field of modern industry, and it is to be observed as well in those cases where instalment selling is not practiced at all. The continuous reduction of price is true again of all industries where inventions and improvements are exerting their influence. All that can be said for the above contention, therefore, is that in so far as instalment selling is an accompaniment of modern methods and in so far as marketing methods form one of the elements in the productive process, instalment selling is doubtless to be credited with its share of influence in bringing about the general results. But exactly how much is to be ascribed to it cannot be ascertained.

The situation is, however, a little different when we seek to analyze the particular points in which instalment selling may be credited with specific influences on production.

Among these effects must in the first place be put the

stabilization of output. We have pointed out in the historical part that this in itself had not a little to do with the origin of instalment selling as applied to automobiles. It was the difficulties connected with the seasonal demand that led to the introduction of the system. Although the credit granted to the distributor was not of the instalment variety, his ability to pay was strengthened by the grant of instalment credit to the purchaser. To the extent that instalment selling has enabled the producer to overcome the difficulties of the seasonal demand, it has probably contributed to the regularity of the output, with a consequent possibility of economies and of reducing costs.

In the second place, we have seen that instalment credit on the whole tends to increase the purchasing power of the consumer. Since supply depends upon demand, it follows that the increase of purchasing power means an augmenting of profitable production. It must, however, be remembered that a generalization of this kind is somewhat hazardous. There are undoubtedly cases where instalment selling represents a change in the form of consumers' credit, rather than an addition to purchasing power. We have seen that in the clothing business, the ten-payment plan has led not to any increase of consumption credit in general, but rather to a substitution of fractional credit for lump-sum credit. We have also learned that the stores which have employed the ten-payment plan have for the most part grown at the expense of others that continue to pursue the older methods. From the point of view of the economic interests of the community at large, therefore, it is not all certain that in the clothing business the instalment plan has denoted an increase in purchasing power in general.

Moreover, as we have seen above, the advantages of the instalment plan are largely limited, so far as this

point is concerned, to more or less durable commodities, where it is somewhat more easy to calculate the exact effects of productive utilization. In the paint business, for instance, the instalment plan has proved to be a failure, and the endeavor to apply the system to plumbing and the like does not seem to promise much success. In all such instances, it appears to be difficult to prove any increase in the total purchasing power of the consumer.

In the case, however, of automobiles and the analogous commodities to which instalment selling has been successfully applied, the situation is different. If instalment selling approves itself to the consumer as a method of diminishing either sacrifices or exertions, as in the case of the automatic washing machine, or of increasing satisfactions and enjoyments, as in the case of the automobile and the radio, we can properly speak, as we have seen, of an increase of purchasing power; and manifestly an increase of purchasing power must ultimately translate itself into an advantageous effect on production, especially in those industries operating under the law of decreasing costs.

There is a final point which deserves a word of mention. The introduction of an invention or new method in any phase of the productive process naturally causes a dislocation of the equilibrium. When new commodities come upon the market, there is always an initial stage of great development. It is only after a time that the so-called saturation point is reached, where new products are bought largely for the purpose of replacing worn-out or discarded goods. Instalment selling, being in itself a new device and applied in large measure to commodities of recent introduction, must be considered from this point of view also. The effect of instalment selling on production will, therefore, differ not only

with every class of commodity, but perhaps also with each successive period of time.

Here, however, we must be careful not to fall into the opposite extreme. It has been contended, for instance, by some that to the growth of the automobile business in general, and to instalment selling in particular, there must be given almost complete credit for the great prosperity in the United States in recent years and for our protracted immunity from industrial depression. Rather lugubrious anticipations are expressed as to the future, when production will again exceed the possibilities of consumption.[1]

It may be pointed out, however, that there is no such adamantine limit to the purchasing power of the community, and no such fixed saturation point as is often assumed. The saturation point in human wants is one that is susceptible of being constantly removed into the future. Purchasing power depends upon income, and if as a result of improved processes, both of production and of distribution, the income of the consumer constantly rises, his purchasing power will grow in proportion, and the saturation point of his enjoyments and purchases will continually recede. If the farmer's income grows, he will be induced to use several automobiles instead of a single one; and when he has a sufficient number of automobiles, he will, if permitted by his income, gradually increase their quality. There are, in other words, no limits to the growth of demand save those which depend upon the physical and economic restrictions on production. If the possibilities of output are boundless, the possibilities of consumption are still more so.

The above discussion thus brings us to the conclu-

[1] William T. Foster. "The Basic Meaning of the Growth of Instalment Selling." *Proceedings of the Academy of Political Science of New York*, Vol. XII (1927), No. 2, p. 112. Cf. the more popular article by William T. Foster and Waddill Catchings, "Instalment Selling and Future Buying," in *The Nation's Business*, August, 1926.

sion that at both ends of the business structure instalment selling exerts a well-defined beneficial influence. Through its effect on demand or purchasing power, it has also achieved certain definite results on supply or output. Instalment selling has in fine rendered possible a greater production because it has contributed to the enlargement and to the steadiness of the market.

There remains, however, one other phase of the business process to which particular attention must be called, and which has given rise to much discussion. We refer to the influence of instalment selling on the credit structure of the country, a point to which we shall devote the next chapter.

CHAPTER XIV

THE EFFECTS ON THE CREDIT STRUCTURE

1. Credit Risks

The first problem that here presents itself is the question of the credit risk. Are the risks attendant on instalment selling something peculiar to it, or do they simply constitute another version of credit risks in general?

From one point of view it would seem that all consumers' credit involves special risks in comparison with producers' credit because there is a somewhat less close calculation and a somewhat less accurate accounting. As we have seen above, in Chapter VII, the anticipated income of the producer is calculated in money, while that of the consumer is estimated in the more or less intangible terms of future enjoyment. Moreover, it is probably true that consumers as a class do not possess the same skill in financial management as that displayed by business men, and that, consequently, expectations and results will probably coincide more closely in the case of production transactions than in that of consumption transactions.

On the other hand, nothing is more familiar than the difference between individual producers or individual business men. Credit risks in ordinary life are classified not only according to the various categories of business, but more especially according to the credit standing of the individual. If Smith has a credit rating of A, and Jones a credit rating of C, it is more than probable that the extension of consumers' credit to Smith will be safer than the extension of producers'

credit to Jones. In other words, what is common to both producers' credit and consumers' credit, namely, the standing of the individual, is more significant than any distinction between producers and consumers as a class. The same is true as between instalment credit and any other form of consumers' credit. Instalment selling may indeed need a technique of its own, and may require a more careful and detailed examination into the solvency and reputability of the individual; but at bottom the problem is one affecting the grant of any kind of credit.

In order, however, to test the validity of the alleged distinction between the risks of instalment credit and those of other forms of credit, we have instituted a rather extensive inquiry. As will be seen from an examination of the dealers' study in Appendix Five, a part of which deals with the banking experience of automobile dealers, about 4,500 forms were sent out to banks, and a fairly satisfactory number of answers were received, covering the seven years from 1919 to 1925, and involving in the latter year a total borrowing of almost $32,000,000, with an average borrowing per dealer account of about $26,000. The banks in question were found in cities of various sizes and in practically every state of the Union.

It is interesting to note that, according to the dealers' study, almost 45 per cent of all the dealers were either discounting customer paper or borrowing on their own notes to finance the retail sales of passenger cars. The losses experienced by the banks on this automobile paper have gradually been reduced, so that in 1925 they fell to the figure of 2/10 of 1 per cent, which corresponds to the usually accepted maximum for bank losses. When asked as to the causes of the dealers' failures that were responsible for the losses, the great majority of the bankers gave as the chief explanation of

failures the sad experiences of the dealers with repossessions and too large allowances on used cars. Other causes in the order of their importance were specified as lack of capital, mismanagement or lack of ability, lax credit extension, dishonesty, and credit terms. These statements confirm the conclusions, reached above, that the central problem of instalment credit in regard to automobiles is connected with repossessions and the extravagant allowance on used cars, especially in the endeavor to satisfy the intending purchaser of a new car by allowing him an inordinate amount on the trade-in.

When asked to compare their experiences as to instalment paper with other forms of credit as handled in their ordinary accounts, the great majority of banks reported that they considered the dealer accounts no more troublesome than the others. About 10 per cent of the whole number thought that the dealer accounts were more troublesome because of the detailed work involved in handling the accounts; and a somewhat larger number deemed the accounts more troublesome for a variety of minor reasons, which may be consulted in the report itself.

The figures as to losses as given above are confirmed by the published figures of the losses of the larger finance companies.

In a survey[1] that was made at the end of 1925, and that covers the experience of a large number of finance companies, some interesting details are found. The average amount of the note at the time of purchase has been steadily declining, so that in 1924 the average note on new cars was $587, and on used cars, $303. The loss ratio, so far as the finance company was concerned, amounted in 1924 to .18 of 1 per cent, that is, slightly

[1] C. C. Hanch, *The Safety Zone of Automobile Financing.* National Association of Finance Companies, 1926.

less than 1/5 of 1 per cent. This covers both new and used-car paper, amounting to $193,000,000, and comprises both recourse and non-recourse paper. In 1925 the loss ratio amounted to .157 of 1 per cent, that is, a little less than 1/6 of 1 per cent on used-car paper with guaranty; and to a little less than ¾ of 1 per cent (.735 of 1 per cent) on used-car paper without guaranty. At the end of 1925, the average note on new cars had fallen to $528, and on used cars to $280.

The table on the following page shows a great increase of losses according as the terms become more lax. Taking the twelve-month payment system as the standard, we find that the loss from repossessed cars is 57 per cent higher when the terms are extended to sixteen or eighteen months. Where the monthly payments extend over a period of more than eighteen months with so-called balloon notes, the loss is 341 per cent higher. Furthermore, an interesting ratio is disclosed between down payments and repossessions. The percentage of repossession of new cars with one-third down payment is 1¾ per cent. If the down payment is only one-fourth, the percentage of repossessions grows to 3.8 per cent. Where the down payment is less than one-fourth, the percentage grows to 11 per cent. The same tendency is observable in the case of used cars. With 40 per cent down payment, the percentage of repossessions is 3 per cent; with a down payment of less than 37 per cent, the percentage of repossessions is more than doubled, amounting to 6 1/6 per cent. Similar conclusions as to losses in the case of both new and used cars will be clear from the figures in the table.

What is true as to the small amount of losses sustained by finance companies in general, is especially true of large finance companies like the General Motors Acceptance Corporation. The losses experienced by this

TABLE XXVIII

SUMMARY OF AVERAGE EXPERIENCES BASED ON ONE YEAR'S RECORD OF MANY AUTOMOBILE FINANCE COMPANIES: COMPLETED NOVEMBER 1, 1925

	Losses on Repossessed Cars			Repossession Ratio New Cars			Repossession Ratio Used Cars		Used Car Percentage of Special Paper			
	12 Monthly Payments	16–18 Monthly Payments	19 Monthly Payments	1/3 Down Payment	1/4 Down Payment	24% and Less Down Payment	40% Down Payment	36% and Less Down Payment	Paper Per Cent of Total	Cos. Requiring Dealers Endorse. Used Cars	13 Monthly Payment	35% Used, 25% New, Down Payment
Average..........	$50	$78	$220	1 3/4%	3 8/10%	11%	3%	6 1/6%	31%	94%	18 1/3%	19 1/3%
Above standard....		56 2/3%	341 1/3%		121 1/2%	537%		104 2/3%				
Loss ratio 12 mo. ..				.163%	36%	1.041%	.536%	1.1%				
Loss ratio 16–18 mo.				.254%	.563%	1 625%	.839%	1.716%				
Loss ratio 19– mo...				.716%	1 587%	4 583%	2.537%	4 84%				

Company are given in the following table, which shows the cumulative credit net write-offs as of December 31, 1926, related against the annual volume of total retail paper purchased from 1920 to date.

TABLE XXIX

COMPARATIVE STATEMENT OF PERCENTAGE OF LOSSES SUSTAINED BY THE GENERAL MOTORS ACCEPTANCE CORPORATION

Year	Percentage of Loss
1920	.910
1921	.677
1922	.109
1923	.055
1924	.099
1925	.085
1926	.035

The inference from the above discussion is that the essential point in the credit risks ascribable to instalment selling is connected with repossessions and the used-car problem; and that this condition is intimately related to the pressure brought to bear upon the dealer to extend the sale of his new cars. We come back, in other words, to the fundamental problem of instalment selling—the danger of abuse through the grant of too liberal terms. It is in connection with this problem that a discussion of the recourse method becomes significant because of the fact that upon this arrangement rests the decision as to who is to bear the loss, and, indirectly, as to who is to be responsible for the credit analysis.

2. Recourse or Non-Recourse

The original system, as we have seen, was that every dealer financed his own sales of automobiles. As the finance companies appeared, they clung to the same system or developed the repurchase agreement.

It was only by slow degrees that there emerged the method of non-recourse by which the finance companies assumed virtually all the responsibility involved. The question as to the merits of the two systems deserves a somewhat fuller consideration.

If we take up the first stage in the process, that of deciding upon the credit risk in making the original sale, it is obvious that the recourse system is preferable because the dealer will be more careful in extending credit if he has to assume the final responsibility for any error of judgment or any laxness of method. If the responsibility is transferred to some one else, the dealer will be apt to shrug his shoulders and to push the sales to the utmost, irrespective of the ultimate consequences.

Two points ought, however, to be considered in this argument. In the first place, the dealer is never given a free hand, even under the recourse system. If he deals with the finance company, the arrangement which he makes with the individual purchaser must be approved by the finance company before the latter advances any credit. What the finance company does, however, is really to check the credit extended by the dealer, in order to make sure that the latter is not acting unwisely. The finance company exercises a scrutiny over the dealer, but to all intents and purposes the dealer is left largely to his own devices as long as his trend is correct, and as long as the finance company has confidence in him. The recourse company often buys paper on the dealer's own ideas, if there is a fair assurance that the dealer has used good credit judgment.

While all conservative finance companies will, therefore, exercise some scrutiny over the notes submitted to them by the dealers, it might seem that the non-recourse company would be even more careful than the recourse company because of the greater risk of loss involved. But, even though the recourse company does not bear

the entire responsibility, it will also be likely to suffer losses from the default of the purchaser and the possible failure of the dealer; while the non-recourse company will be torn by conflicting motives—that of avoiding loss and that of securing the business at all hazards. Thus, so far as the scrutiny of the notes is concerned, the balance seems to incline in favor of the recourse method.

More important, however, is the question, not indeed as to the desire of the finance companies to achieve an adequate scrutiny, but as to the possibility of doing so. Here it is obvious that a large finance company operating from a center is without the machinery to institute an adequate control. If it works from a distance, it must delegate the matter to local organizations, the officials of which may not be so directly concerned in the consequences of committing an error. If the finance company desires to guard itself against the results of undue laxity, one of two conditions is imperative. Either it must be a small company, limiting its operations to the immediate neighborhood of the dealer; or, if it is a large company, it must be provided with branches everywhere. This is conceded by the advocates of the non-recourse plan. Mr. Hare, for instance, tells us:[1]

> No-recourse requires for economic and efficient administration a complete organization wherever it functions. One that is actually competent to determine the credit worth of the applicant, take over the collections and accept all liability and expense in connection with its work . . . A large financing company, if very strong financially and prepared to lose considerable money, may secure a factory contract and attempt a no-recourse nationally on the theory that its organization can be built to follow the business. This may possibly work out for the finance company but it contains certain features of speculation, and during the building it must be inefficient on credits and collections which tends to discredit no-recourse.

[1] Emlen S. Hare. *No-Recourse. An Address at the 1926 Annual Meeting of the National Automobile Dealers Association*, p. 3.

It is for this reason that Hare and Chase, until recently the leading non-recourse company, at one time established eighty-seven branches. It is a fact, however, that even thus they did not cover the entire country. Unless the number of branch organizations is increased to hundreds or even to thousands, the objections which attach to a national organization without branches apply, even though in a somewhat less degree, to the branch organizations, each of which has to superintend many localities.

In other words, so far as the grant of original credit is concerned with the investigation of credit risks, which must be largely personal in character and made on the spot, there are only two methods which may be characterized as fairly adequate: either the recourse method or the non-recourse method as applied by organizations which, if national in scope, are prepared to put hundreds or even thousands of local branches at work. The non-recourse method is, therefore, limited from the very outset.

When we come to the second step in the operation—that of collections—the arguments are more evenly balanced. As a matter of fact, collections are now made, as we have seen, largely by the finance company itself, irrespective of whether it is a recourse or a non-recourse company. It seems to conduce to greater efficiency and economy to have the finanee company undertake this work.

In the third place, as far as concerns delinquencies, the situation seems to be the same as in the case of the original sale. Only a careful watch over the individual delinquent, conducted on the spot, before his possible departure, can be of any avail. Under the non-recourse system, again, we see the necessity of a local branch which, if properly organized, would work only in the particular locality. In the case of not a few delin-

quencies, intimate personal acquaintance with, and observation of, the purchaser, is alone adequate to deal with the situation; and this can obviously be more successfully followed up by the individual dealer than by any agent of a distant non-recourse company.

When we come, finally, to default, with the necessity of repossession and ultimate disposal of the car, the situation is still clearer. The effectiveness of the finance company in repossessing and reconditioning repossessed cars depends upon the extent of its operations and organization in the territory involved, and upon its ability to set up an efficient organization to recondition cars —a business foreign to its legitimate or normal function. It is, however, at the point of disposing of the used car that the embarrassment arises. Under the recourse system, the responsibility for selling the used car rests upon the dealer and, as we have seen, it is precisely at this point that most of the dangers and difficulties of instalment selling appear. But, in the case of the non-recourse company, these difficulties and dangers are apt to be multiplied because the company must now devote a part of its energies to selling the used car. Used cars are, as we know, disposed of in two ways: they are sold to the individual who wants a used car, or they are sold to the prospective purchaser of a new car, who utilizes the used car as a trade-in. In both cases the finance company is now compelled to encroach upon the dealer's field and to enter into active competition with him. He competes with the dealer in getting rid of the used car; and to the extent that the used car is bought by some one who intends to turn it in as a partial exchange for a new car the finance company has its influence on the sale of the new cars.

In other words, the finance company must now depart from its original purpose, which is that of extending credit, and it must enter upon the new field

of marketing cars. Thus the two functions of extending credit and of merchandising are confused.

It is not, indeed, contended that such a situation is impossible. There is in the nature of things no reason why some huge organization should not have separate branches, one devoted to credit work and one devoted to merchandising. It is even possible that this may possess some advantages, as when a non-recourse company in control of a large number of repossessed cars may transfer some of these from a distressed section to a more prosperous section—an activity scarcely open to the separate dealers, and one which may in certain cases relieve a bad situation. There is, in fact, in the nature of things no reason why the manufacturer himself should not undertake all three functions, that of producing the car, that of advancing credit on the car, and that of selling the car.

Such a condition, however, would run squarely athwart the modern organization of economic life, which rests upon specialization and division of function. If there are any advantages in the principle of division of labor, they can best be achieved by the principle of segregation of organization to keep pace with the separation of function. We have, indeed, in recent times many examples of centralization and integration of industry; but these, after all, proceed only up to a certain point and stop when there is danger of confusing the distinction which is a characteristic of the modern economy.

A chief distinction in modern economic life is that between banking and merchandising. The banker may be compelled to take over the management of an industry in order to preclude its bankruptcy; but this is always an incidental, and never a primary, function. The banker is here to extend the necessary credit, not to carry on the business, which can normally be conducted far

better by the merchant or the manufacturer. In the same way the finance company borrows money with the clearly understood purpose of using it in order to extend credit to the merchant or dealer, and not with the understanding that it is going into the mercantile business and making a merchandise inventory a recognized portion of its assets. In consideration of the fact that the finance company's assets consist almost entirely of cash and liquid receivables, it may safely predicate its borrowing capacity or liabilities in a comparatively high ratio to its capital, and may thus depend upon a high rate of turnover and a low per-unit return, which would not be either safe or practicable were it to indulge in the lower rate of liquidity and capital turnover of a merchandising business.

Accordingly, while the finance company may adjust its operations in close harmony with the peculiar needs of the automobile industry, the character of its operations should be strictly confined to those of a credit nature, because in this way it can make the greatest contribution to the industry as a whole. To predicate its operations on the theory that its final protection from loss lies in its skill in liquidating merchandise would thus be directly opposed to the most elementary principles of banking practice. That, in the course of its business, there might be cases where its last resort for recovery of the equity would lie in seizing the merchandise is indeed conceivable; but only as an incident, not as a primary operating principle.

The inevitable consequence of non-recourse is the setting-up of local merchandising units—with storage facilities, service stations, reconditioning plants and advertising—all of them in competition with existing organizations, and involving an unnecessary and costly duplication. In the long run, the reselling of repossessed cars by the finance companies will not only interfere

with the normal business of the dealer, but must affect the liquidity of the finance company as such. This would result in restricting the volume and increasing the cost, and would assuredly have its repercussion on the industry as a whole. Efficiency and economy can best be attained by a division of function, which will allocate to each stage in the entire process its proper field.

The arguments are therefore clearly in favor of the recourse method as the most natural and in greatest harmony with the modern tendency of specialization. The finance company is properly a dispenser of credit, not a seller of automobiles. The recent *débâcle* of Hare and Chase—the largest non-recourse company—lends point to this conclusion, and renders it exceedingly probable that within a short time all the large and responsible finance companies will follow the recourse plan. Non-recourse is therefore to be looked upon with suspicion as involving a method attended with many drawbacks.

3. Instalment Credit and the Banks

Another criticism by those who steer close to business realities is that financing of instalment sales by commercial banks is a misuse of bank credit, in that it will, when practiced on a sufficiently large scale, impair the liquidity of credit and involve inflation, with all that this implies. This charge, if true, is serious. A jarring of the credit structure involves a crisis which weakens all economic life; but it will affect most severely those who have invested capital and built up large plants, the output of which is sold to a great extent on the instalment plan.

To grasp the import of this criticism we must be clear as to the nature of banking credit and the significance of banking liquidity. It has often been asserted that commercial or deposit banks simply transfer for the time being unemployed or under-employed funds from

the owners to others who are in a position to make so effective a use of the funds that they will be able not only to meet the interest charges but also, within a short time, to make a profit over and above the interest. Such a statement would be correct if the banks limited themselves to loaning only the amounts of actual money deposited with them. This was, as a matter of fact, the experience of the early continental and English banks which served to facilitate the operations of merchants, and primarily of those engaged in foreign trade on a large scale. It is, however, obviously impossible to make such an assertion about modern banks. The amount of loans and discounts carried by the banks in every modern country is many times greater than the reserves in the form of gold or paper money. By issuing bank notes and by allowing their borrowers to draw sight drafts on them in excess of the actual amount of cash held, banks create new purchasing power which, so far as it is accepted in general circulation, is just as effective as the purchasing power represented by metallic, fiduciary or fiat money.

The banks have only recently developed this ability to create purchasing power. It is the growth of a certain technique and the change in the habits of the business community connected with it that have permitted banks to become what they are. This technique enables banks to honor their note and deposit obligations on demand, thus providing the conditions most essential for the confidence reposed by business men in their promises. This confidence is in its turn the basis on which there has developed the custom of using, in all transactions of any magnitude, sight orders on banks in the place of actual money.

This bank technique includes a number of practices, the most essential of which may be recalled here. A part of the technique consists of measures designed to

weld the individual banks into an organized system, in such a way that an expansion of credit can be carried on evenly by all the members of the system. In the case of an unexpected over-expansion by any member, assistance is rendered by the fellow members who occupy a stronger position, with the result that eventually the over-extension is spread out in a thin layer over the whole surface. If such a degree of co-operation among the banks is obtained—and that is the goal to which modern tendencies point—it is permissible to speak of the banking system of a country instead of the individual banks.

Another part of the technique comprises provisions designed to arrange the maturing of obligations in such a way that on any given day the payments to be made by the bank should, as nearly as possible, balance the total amount of drafts likely to be presented. The probable excess of payments over receipts is cared for by a cash reserve of proper size. It will be noted that such a mutual balancing can work effectively only if the maturing obligations are promptly paid in all but special cases. This is the core of the problem of liquidity, in both its theoretical and its practical aspects. If liquidity is to be preserved, i.e., if the banks are to function normally, the banking policy must provide some means to insure prompt payment of all maturing obligations.

The task of the banks is facilitated by the fact that they are actually in a position to secure such promptness on the part of their debtors. Let us consider the situation so far as concerns the banks in their dealings with ordinary business enterprises. The borrowers will be enabled to meet their obligations if they can realize on their merchandise before the obligations mature: in the long run, they must also be able to sell at such prices as to make a profit attractive enough to induce them to remain in business. If we recall the fact that

a large part of the transactions are consummated through the use of checks and bank notes, i.e., of purchasing power created by the banks, it is clear that banks can secure, by a skillful extension of credit, not only the marketability of the borrowers' goods, but also such a spread between costs and prices as to insure to the borrowers an adequate profit.

If we attempt to analyze the situation more closely, we may picture it as follows. The goods dealt in, or manufactured by, the borrowers may be either producers' goods or goods ready for immediate consumption. In both cases the costs are composed of many items, all of which, with the exception of wages, are controlled more or less by the banks through the amount of credit which they extend to the manufacturers. The degree of control which the banks can thus exercise over the price of the product naturally differs. In the case of producers' goods, the banks are in a position to influence both the supply (through the credit extended to the manufacturer) and the demand (through the credit extended to purchasers). In the case of goods purchased by ultimate consumers, while it is true that the demand is only to a certain extent influenced by banking policy, some control is nevertheless possible. For the incomes of a large part of the consumers consist of wages, salaries and profits, the amount of which is affected to a considerable degree by the extent of business activity; and this business activity itself depends largely on the facility of obtaining bank credit.

Thus a careful, well-proportioned distribution of credit extension among the various branches of business constitutes the means by which the banks are able to maintain their own liquidity and, in the last analysis, to render possible their own continued existence. The proper proportions which the banks must observe in the distribution of credit are to a great degree fixed for them,

rather than by them. In other words, they are regulated primarily, so far as the banks control the distribution of purchasing power among the various population groups, by the varying tastes of the consumers, and by the state of the industrial arts. This is true at least to the extent that it influences the proportions in which the various producers' goods are combined in the manufacture of consumers' goods.

We have thus far not mentioned the length of the maturities of the bank loans. It is commonly supposed that short maturities are the essential condition of bank liquidity. Many would even include this item in the definition of commercial bank credit. The length of maturity is indeed important in two respects. In the first place, the balancing of receipts and payments by banks is most simple when all of the maturities are of an equal length. The major part of the claims made on the banks in the form of checks are drawn so as to pay maturity obligations or to transfer deposits from one account to another. If there is no appreciable discrepancy in the length of maturity, and if seasonal accelerations and retardations of activity in various lines offset each other on the whole, the balancing of receipts and payments can be easily achieved. The longer some maturities run, the more room there is for discrepancy in the duration of the accommodations provided by the banks and the more difficult is such a balancing.

In the second place, liquidity depends upon the maintenance of certain relations between prices, which are themselves affected by the persistence of certain forms of effective demand on the part of consumers and by their reactions upon producers. Consequently, the more remote the future demands which the banks anticipate by providing credit, the greater will be the chance of change either in the taste of the consumers or in the technique of production that will render possible new

combinations of productive factors. The length of maturities is, however, important also because the perfect liquidity described above is not yet really attained by our banks. The degree of co-operation among the banks and the unity of the banking system are still far from ideal; a single and comprehensive bank policy which co-ordinates credit extensions to all forms of business has been achieved only in the roughest outline. Another disturbing factor is that credit is not used to an equally wide degree in all branches of production and that, accordingly, the degree of banking control does not remain the same. Under such conditions, the farther one gets away from the present, the less is he able to control or to foresee future processes. As a result, the danger of a failure of borrowers to pay on a large scale is greater or, in other words, the bank liquidity is diminished.

We are now in a position to appreciate the full meaning of the charge urged as to the impairment of liquidity involved in the financing of instalment sales. Liquidity is evidently assumed to be impaired because the probability that instalment borrowers will meet their obligations is less than in the case of the ordinary business borrowers; and also because the extension of loans for a longer period of time than the average maturity of commercial loans makes it more difficult to maintain the balancing of receipts and payments by the banks.

What shall we think of these contentions? In the first place it may be said that with regard to the probability of consumers meeting their obligations, it is difficult to see why the bank policy described above, by means of which the banks secure the prompt payment of business loans, cannot be extended so as to render possible similar provisions for the payment of consumers' loans. The probability of such payments is a function of the ability and of the willingness of consumers to meet their obligations.

Ability depends, by and large, upon the income of the consumers as well as upon the prices of other goods which offer an attractiveness, or an urgency, superior to that of meeting the obligations in question. Both of these factors, however, can be controlled by the banks through properly proportioned credit extension—the first indirectly and the second in a more immediate fashion. On the other hand, willingness depends chiefly upon the persistence in the taste and the desires of the consumers, and especially upon their estimating as highly as before the uses of the durable goods on which they are now paying instalments. The stability of consumers' tastes is, however, a problem not peculiar to the extension of credit to consumers alone. It is in a sense far more important in connection with the extension of credit to business enterprises in general. For this extension frequently finances the production of goods which reach the ultimate consumers only after so many transformations and after so long a time that it compares very unfavorably with instalment credit.

It is evident, therefore, that so far as concerns the probability of payment, it is difficult to distinguish between loans to consumers and loans to business enterprises. The liquidity of the consumers' loans is indeed not perfect; but the same may be said of producers' loans. To the extent that the liquidity attained by the banking system is imperfect, the addition of consumers' loans to ordinary business loans impairs the liquidity of banking assets just as much as, but no more than, any new extension of credit. The impairment of liquidity, in other words, is chargeable not to the nature of the new loans, but to the fact that they constitute an addition to the volume of credit.

It might, however, be claimed that the more protracted maturity of instalment loans is a reason for ascribing an injurious influence to instalment credit,

because it throws out of gear the delicate machinery of the mutual cancellation of claims. So far as the liquidity is imperfect, and the anticipation of the future is insecure, instalment credit, it might be claimed, enhances the risk incurred by bankers.

We must, however, remember that the amount of consumers' credit is insignificant in comparison to the credit extended in ordinary production and marketing. This disproportion, moreover, is not only found at present, but is likely to continue in the future. Durable consumers' goods will always constitute only a small part of the whole range of consumers' goods; while, on the contrary, the financing of production will always be carried on for the entire mass of consumers' goods. Again, for the purpose of protecting the creditor, it will always be necessary for the purchaser of durable consumers' goods to retain a considerable equity in them from the beginning, i.e., as we have seen, to invest in them some of his own savings. As a consequence, these durable goods will always be financed for only a part of their value by bank credit. Finally, it must be remembered that it is primarily the later instalment payments, the maturity of which exceeds that of the average commercial loan, which can cause any of the trouble specifically attributable to instalment loans.

We see then that this new use of bank credit does not threaten the banking fraternity with any special new danger. If this is true, are there any advantages that the community is likely to derive through the grant by the banks of instalment credit?

If we pursue to the end the line of argument mentioned above, it would seem that the benefits of this new use are similar to those which bank credit was found to yield in its older and more established uses. Creation of new purchasing power and its employment

in business have tended to facilitate exchanges because they have removed such obstacles as the request on the part of the sellers for definite prices, and the lack on the part of the buyers of purchasing power. Acceleration of exchanges, however, implies an inevitable expansion in the sphere of production, inasmuch as the beginning and the end of all the productive processes carried on by business men consist of purchases and sales. The results of this increase in production supplied the true material basis which supported with ease the new purchasing power. The use of bank credit thus strengthened the business motives for the utilization of greater quantities of productive forces available in the community, and accordingly engendered an increase in the material wealth. In this way bank credit has constituted one of the sources in the growth of the community's surplus, represented by the enormous quantities of raw materials and of manufactured goods which are comprised in the ever-lengthening chain of productive processes that connects natural resources with the goods ready for immediate consumption.

Bank credit designed to finance in part the purchase of durable consumers' goods may be expected to produce similarly favorable effects. By facilitating exchanges, it is likely to provide new business incentives for increased production and for fuller utilization of the available resources, which will eventually spell an increase in the material wealth out of which will be made the savings represented by the unused capacity of durable consumers' goods. Just as the creation of purchasing power by the banks, designed to enable business enterprises to carry raw materials and supplies while they were subject to technical transformation in production, has made possible an acceleration in savings utilized to provide the increased

quantities of raw materials, so the extension of credit in durable goods to consumers renders possible, through augmented production, new savings incorporated in the unused capacity of durable consumers' goods.

Thus, not only is this new form of bank credit free from danger when its regulation becomes part and parcel of the general banking policy; but the benefits which it may be expected to yield are analogous to those imputable to the ordinary commercial uses of bank credit.

Another advantage which the instalment method affords to the banking system is the opportunity for investment in lines where, as in the notes of finance companies, the risk is distributed over a wide variety of occupations, of geographical areas, and of industrial situations. Such a distribution of risks is not ordinarily available to a local bank; and its possible significance in the development of bank credit must not be overlooked.

While, therefore, it may be accepted as true that instalment credit is not more dangerous than the ordinary forms of credit, and while, on the contrary, it seems to have some additional advantages of its own, there still remains the question as to whether there are any particular dangers ascribable to instalment credit in connection with the existence of commercial depressions and the business cycle. To this final topic, in which fortunately there will also be some possibility of using factual material, we now turn.

4. Depressions

An argument often advanced against instalment selling is that its effect on the business cycle is unfortunate. The reasoning is as follows: Inasmuch as competition not infrequently leads to a desire on the part of the dealers to increase present sales at all costs, often without due regard to ultimate safety, and accordingly to reduce the terms below the level demanded by ordi-

nary prudence and business sagacity, the peak of the business cycle is driven somewhat higher, with a consequence that when the slump comes, there will be a correspondingly deeper trough. Instalment credit, in other words, is supposed to accentuate the intensity of the depression. It is argued furthermore that when a depression comes it will be made much more severe because everyone is in debt and, with earnings reduced, will be forced to surrender the cars, filling the storehouses with used cars and making it almost impossible to sell new ones.

It is true, indeed, that we do not yet thoroughly understand the causes of business fluctuations and that there are almost as many theories on the subject as there are writers. Some things, however, we do know. One of these is that business fluctuations have been a concomitant of our modern capitalist system. Before the advent of industrial capital and the factory system, periodic business crises were unknown or, at all events, exceedingly rare, and even then were generally caused by wars or natural calamities. If, therefore, business cycles are the concomitant of capital and if instalment credit connotes an addition to, or a more intense utilization of, capital, it might be thought to follow that this new form of credit is apt to accentuate business crises.

This presupposes, however, that the sums involved in instalment selling constitute a great net addition to the volume of credit. Whether this is true is by no means assured. We have learned above that in many lines instalment credit simply means a change from one form of consumption credit to another. Moreover, when we consider the aid given by the banks—and that is the important point at issue—we must remember that a part of all instalment transactions consists of cash payments; and that within a given time the volume of outstanding

paper is necessarily much less than the total amount issued. The study made by the Federal Reserve Bank in Boston a few years ago shows how exaggerated are some of the current views. More recently an investigation of the subject has been made by one of my former students.[1] Anderson presents the following table of changes in the deposits, loans and investments of the reporting member banks which, although only 700 in number, include all the great city institutions and hold about 47 per cent of the bank deposits of the country.

TABLE XXX

DEPOSITS, LOANS, AND INVESTMENTS OF REPORTING MEMBER BANKS
(IN MILLIONS OF DOLLARS)

	(1) Demand Time and U. S. Deposits	(2) Total Loans Discounts and Investments	(3) Loans on Securities	(4) All Other Loans and Discounts	(5) Total Investments in Securities	(6) Sum of (3) and (5): Loans on Securities + Investments
1921						
January 7...	13,966	16,561	3,995	9,224	3,342	7,337
1922						
January 4...	13,684	14,771	3,683	7,523	3,565	7,248
1923						
January 3...	15,626	16,353	4,215	7,404	4,734	8,949
1924						
January 2...	15,705	16,622	4,269	7,798	4,555	8,824
1925						
January 7...	18,289	18,661	4,901	8,205	5,555	10,456
1926						
January 6...	18,881	19,625	5,864	8,317	5,444	11,308
April 7.....	18,569	19,493	5,354	8,448	5,530	11,044
July 7......	18,820	19,711	5,678	8,380	5,653	11,331
October 6..	18,966	20,023	5,717	8,697	5,609	11,326

The finance paper of corporations engaged in financing instalment buying is included in column 4—"All Other Loans and Discounts"—but the same column com-

[1] Benjamin M. Anderson, Jr. "Bank Money and the Capital Supply." *The Chase Economic Bulletin*, Vol. 6, No. 3, p. 7.

prises also strictly commercial and real estate loans as well as other items. There seem unfortunately to be no available statistics which would enable us to segregate finance paper from the other items. Even thus, however, it is seen above that the total in Column 4, in 1926, although naturally somewhat smaller than during 1921, where the bank conditions reflect the result of the "boom" year of 1920, is only about 900 millions more than in 1922. Even if we assume that this increase of less than a billion dollars is due exclusively to finance paper, it forms only a small proportion of the increase of total bank credit reported in the last column of loans against stock and bond collateral. It is true that we do not know how many of the loans on collateral were made for the purpose of financing instalments, or in cases in which the dealer supported his line of credit with collateral; nor do we know how far paper on guaranty in instalment sales may have been substituted for ordinary commercial paper. But even allowing for these, it must be concluded that the intensification of the business cycle through the spread of instalment selling is less than is sometimes alleged and that, at all events, its influence is slighter than that of some of the other factors which are responsible for the increase of bank credit.

In the next place, if instalment selling is largely dependent upon payments from the current income of the consumer, we must inquire what effect the business crisis exerts upon wages as compared to profits. That profits virtually disappear during a business crisis is certain; that unemployment grows is equally sure. But the unemployment is only partial, not total; and the aggregate amount of wages or salaries that continue to be paid even during the period of depression is still substantial. Profits stop; wages and salaries do not stop. While the repayment of business loans may at a pinch

be made out of other funds, the conversion of business profits into losses seriously reduces the chance of repayment. Even though the banks may contract at the first signs of storm, the bank losses generally keep pace with the business depression.

This point may be illustrated by taking the figures of income as presented by the Bureau of Internal Revenue. We print herewith the following table:

TABLE XXXI

PERSONAL INCOMES
(IN MILLIONS OF DOLLARS)

Source	1916	1917	1918	1919	1920	1921	1922	1923	1924
Salaries and wages..	1,478	3,648	8,267	10,756	15,270	13,813	13,693	14,230	13,617
Business profits.....	3,070	3,959	4,630	6,708	5,927	4,170	5,258	7,587	8,079
Property..........	3,861	4,470	4,848	4,974	5,492	5,345	5,920	7,502	7,882
Total...........	8,350	12,077	17,746	22,438	26,690	23,329	24,871	29,319	29,579

If we compare the situation in the prosperous year of 1920 with the depression year of 1921, we see from the above table that salaries and wages shrank from \$15,270,000,000 to \$13,813,000,000, involving a reduction of \$1,457,000,000 or 9½ per cent. On the other hand, business profits fell from \$5,927,000,000 to \$4,170,000,000, involving a reduction of \$1,757,000,000, or a fall of 30 per cent. In other words, business profits shrank at a rate more than three times as great as did wages.

The inference is that, from this point of view, instalment credit, extended as it is largely to recipients of wages and salaries, is likely to produce less effect on the business cycle than producers' credit, resting upon profits.

We have been able to test out this theory by the so-called depression study printed in Appendix Seven, which refers in part to the experiences of a large automobile finance company during the coal strike of 1925. This study is significant because it deals not with partial unemployment, but with well-nigh total unemployment, even though the stoppage was in a measure anticipated. It accordingly gives a picture which is overdrawn so far as industrial depressions in general are concerned.

As is explained more in detail in the Appendix, a study was made of the dealers, both in the anthracite region and in the surrounding area. A minute examination was conducted into the changes in the amounts of the anticipations of the sums paid on time, as well as of the delinquencies. It was possible to ascertain the changes in delinquencies from day to day and from month to month. Passing over the details of the methods employed, and of the facts ascertained, we present on the following page a tabular summary of the results.

From the following table it will be seen that there was a gradual increase in the delinquencies as the strike progressed, and that the cumulative effect was pronounced. There are, however, some other inferences to be drawn. The increase is especially noticeable in the accounts running from thirty to ninety days overdue. This is of double significance. In the first place, it throws light upon one aspect of the credit problem which confronts those that grant instalment credit. Secondly, it indicates the type of loss which may be expected by those dealing with instalment credit, even when every reasonable precaution has been taken to eliminate the risk.

In the situation which was the subject of the depression study, approximately one-half of the entire popula-

tion were without work for almost six months; and during this time they received an income of something less than they otherwise would have done. From ordinarily good credit risks, therefore, they became, without any individual fault of their own, comparatively bad credit risks. The question arises as to whether these risks can be minimized.

It is clear that, inasmuch as the risk is not a personal

TABLE XXXII

SUMMARY OF RESULTS OBTAINED IN THE DEPRESSION STUDY REPORTED IN APPENDIX SEVEN

1. Distribution of Payments in the Anthracite Region

	Average Percentage of Maturities in the Anthracite Region		Average Difference between Anthracite and Surrounding Area		
	Jan.-Aug. 1925	Strike Period	Jan.-Aug. 1925	Strike Period	Net Change*
Anticipated	11.71%	10.33%	+0.09%	+0.84%	+6.41%
Paid in month due	73.59	69.20	−2.85	−6.48	−4.95
Delinquent	14.70	20.47	+2.75	+5.64	+18.98

2. Maturities Delinquent and Paid by Groups in Anthracite Area

Days After Due	Average Percentage		
	Jan.-Aug., 1925	Strike Period	Net Change
11–20	6.91	6.89	− 0.03
21–30	2.78	4.22	+ 51.80
31–60	4.29	5.57	+ 29.83
61–90	0.60	0.98	+ 60.33
Over 90	0.15	0.92	+513.33

* The change in the average position of the anthracite area as compared with the surrounding district between Jan.-Aug., 1925, and the strike period.

one, it cannot be guarded against by any kind of credit analysis applied to the individual. Here again, as in the preceding chapter, we are brought to the conclusion that the salient consideration hinges on the question of ability to dispose of the repossessed cars without a loss. It therefore becomes essential, especially with an eye to such possibilities as the anthracite coal strike, that the rate of payment be sufficiently rapid to render possible the repossession of the commodity and its sale for enough to pay the balance due. Just as, in the ordinary case of personal credit, security is obtained by not allowing the borrower to become obligated to his limit so, in this case of possible final resort to repossession, safety can be secured only by insisting upon a margin sufficient to allow for a shrinkage or a miscalculation or an emergency. In the anthracite coal trouble, it is clear that the margin was not sufficiently large to allow for the severe curtailment of income which ensued. It must be noted, however, that the type of credit analysis which was made by the dealers in question previous to the strike, was of a very high order. The conclusion would therefore seem to be that while the increase in delinquencies was marked, the change in the rate of collections in an ordinary business depression, where the falling-off of wages would not be so pronounced, ought not seriously to embarrass a firm of reasonable strength, provided that the same ability to make a credit analysis is exhibited as the one actually found in the anthracite district. In proportion as the credit analysis is of a less satisfactory character, the losses will of course be larger. Above all, it must be pointed out that so far as affects the standing of the finance companies themselves, the depression study is of significance because it shows that the curtailment of purchasers' income may be very severe without the finance company's losing money through bad debts.

In the thousands of transactions involved in the depression study, the loss to the finance company was actually negligible; with the exception of that caused by a single fraudulent dealer whose action, of course, ought in no way to be connected with the strike.

Finally, we must remember that there is another difference between instalment credit and ordinary bank credit. When the time comes to pull in sail, instalment selling can cease altogether. If the general business outlook is squally, the prudent dealer will stop selling on instalments or will be induced to do so by the finance company. As a consequence, the total volume of outstanding paper will diminish with every succeeding week; and, in the case of automobiles, it will completely disappear within several months. In ordinary business practice, however, it is precisely in bad times that the bank is compelled to continue to extend its credit to customers of doubtful solvency, in order, if possible, to tide them over the difficulty. A sudden and complete cessation is in the one case a dramatic, and in the other a prosaic, phenomenon.

It is perhaps true that as the volume of instalment paper increases, it will approximate in this respect more closely to ordinary commercial paper, and that the lenders will be induced by the pressure of events to deal more considerately with the consumer, as the banks now do with the producer. At present, however, although we do not possess enough facts to speak with a high degree of confidence, the balance seems to be swinging in favor of instalment credit.

Finally, it has even been suggested that the recovery from a business recession may be accelerated by the practice of instalment selling, when sales could otherwise not have been made. The recovery in the automobile business after the depression of 1921 is sometimes ascribed to this cause. The material at our disposal, however,

does not permit any confident pronouncements on this topic.

If we take all the above points into consideration, it follows that while in some respects instalment credit may tend to intensify business depressions, in other and perhaps more significant respects the opposite is the case. At all events, frozen credits are not necessarily the concomitant of instalment selling.

Summing up the entire matter, we see that the so-called dangerous effects of instalment selling upon the credit structure have probably been much exaggerated. That there are some dangers is undoubted. The problem of safeguarding the credit structure is one common to all forms of credit. Loan sharks are of hoary antiquity. Instalment sharks have grown apace with the new business, and are not always limited to the low-grade instalment practices. In the case of ordinary credit, regulatory banking laws and blue-sky legislation have been enacted to protect the innocent investor. Similar laws, albeit with a new name, will no doubt soon make their appearance in the instalment field. But the abuses and perils that have crept into banking practices and ordinary commercial credit no longer blind us to the essential advantages of bank credit to the economy as a whole. The same result may undoubtedly be expected to ensue with instalment credit.

CHAPTER XV

CONCLUSIONS

We have come to the end of a long discussion. We have seen that while not a little light can be thrown upon some of the problems of instalment selling by an examination of the facts, there remain not a few points where a judgment rests for the present upon general economic reasoning. Let us attempt to restate here some of our principal conclusions.

Instalment selling in the sense of making a final liquidation through the method of successive fractional payments, is both old and new. It is old in that it has been used in both public and private transactions from the beginning of recorded history. It is new only in the sense that it has been applied on a large scale in recent years to certain more durable consumption goods. To all intents and purposes, it has become a problem of the automobile inasmuch as so large a part of all instalment selling is concerned with the automobile.

We have traced the origin and history of modern instalment credit, and have described in some detail the methods employed in so far as they affect the purchaser, the dealer, the manufacturer, the finance company and the investing public.

We have also sought to give more reliable estimates as to the extent of instalment selling and of outstanding instalment paper. Our conclusions were that many of the existing estimates are grossly exaggerated, and that instalment sales, in the case of the durable consumption goods to which the system is primarily applied, amounted at the end of 1926 to about four and a

half billions of dollars out of total retail sales of about thirty-eight billions; and that the total of outstanding instalment paper was about two billions.

We proceeded next to point out that most of the prevalent opinions on instalment credit are the more or less unconscious reflections of prejudice or prepossessions as explained by the self-interest of the individual; and that scarcely a single one of the judgments rested upon either a satisfactory factual basis or an adequate economic analysis.

In our analysis of the situation it was necessary first to note that, inasmuch as instalment credit is a part of consumption credit, the alleged contrast between production and consumption needed a more careful study. This study brought us to the conclusion that the utilization of wealth might be either positive, neutral, wasteful or destructive. Instalment credit, therefore, in the first place would have to be envisaged from the point of view as to whether articles to which it is applied represent a positive or even a neutral utilization. The ordinary charge brought against instalment credit on the ground that there is something illegitimate in the idea of granting credit on consumption goods was seen to be destitute of economic foundation.

Employing the term "consumption credit" in the common acceptation, we traced the development of credit in general and showed how each great change in economic conditions brought with it the evolution of a new form of credit. Each successive form was at first deprecated, then coldly welcomed, and in the end cordially accepted. Instalment credit represents the latest stage of credit.

Inasmuch as instalment credit is a part of consumption credit, we undertook in the next place to ascertain the general modern tendencies of consumption credit, irrespec-

tive of whether or not it is liquidated in lump-sum payments. We found that the growth of consumption credit was affected by conditions which differed not only according to the section of the country, but according to the population of the town and the size of the establishment; and that consumption credit was far more successful under certain of these conditions than under others. While we found it difficult to secure an exact verification of the statement, we came to the conclusion that instalment selling denoted a substantial addition to the total amount of credit rather than a change in the proportions in the various forms assumed by consumption credit.

In our endeavor to ascertain the exact points in which instalment credit differed from the other forms of consumption credit, we saw that there were certain differences ascribable to the commodities themselves, but still more significant differences in the conditions under which the credit is granted. The essential point here we found to consist in the character of the terms on which instalment credit is offered, and in the nature of the security for the grant of credit. In other words, we learned that perhaps the most serious problems of instalment credit clustered around the facts of delinquencies and defaults, with the consequent necessity of repossession. It was therefore to a study of repossessions that we devoted special attention.

In addition to the common criticism that instalment credit is illegitimate because it applies to consumers' goods, we noted the almost equally common objection against instalment credit on the ground that it is granted for the use of luxuries. This led us to a study of the contrast between luxuries and necessities. As a result of our analysis, we were led to emphasize the connection between the so-called luxuries and the rising standard of life in the mass of the community. We

came to the conclusion that while the force of the old objections against certain forms of senseless and extravagant luxury on ethical grounds remained unimpaired, attention ought primarily to be directed to the validity of the economic argument which explains the transition from luxuries to necessaries.

Making a particular application of the above analysis, we pointed out that the automobile must be regarded neither as a luxury nor as a type of foolish and wasteful consumption; but that, on the contrary, the advent of the automobile has marked a revolution in economic and social life which is comparable to that produced by the introduction of the railway; and that, in the one case as in the other, we must weigh up certain resultant evils with the acknowledged benefits; with the conclusion that it is open to little doubt as to where the balance of advantages lies.

In the final part of our discussion, we took up some of the problems connected with the special effects of instalment selling. So far as concerns the consumer, we pointed out that the real problem consists in the contrast between present and future satisfactions, and that a more significant distinction than the one ordinarily drawn between consumers' goods and producers' goods is the distinction that ought to be made between goods that are paid for before or after utilization. The essential service of instalment selling was found to be the putting of durable goods on a par with ephemeral goods, and the rendering it possible immediately to place in the hands of the consumer worth-while commodities which it would otherwise be impossible for him to acquire. We discussed in the next place the question as to whether consumers' judgments are irrational, and found that we must here distinguish not only as among various commodities, but also as among various income classes. The lower we descend in the scale both of in-

come and of durability of goods, the greater we found to be the chance of irrationality and abuse. On the contrary, the higher we ascend in the scale of the class and in the nature of the productive utilization offered by the services of the commodity, the smaller is the likelihood of irrational judgment on the part of the consumer. In such cases we found that instalment selling has a distinct tendency to correct in the process of time any possible distortion of judgment. Finally, with reference to the effect of instalment credit on savings, our analysis led us to the conclusion that instalment credit not only tends on the whole to strengthen the motives which induce an individual to save, but also tends to increase his capacity to do so. Instalment credit, in short, if applied to the proper articles and under the proper conditions, may promote not slavery but liberation.

Taking up next the effects of instalment credit on business conditions, we attempted to analyze its influence on demand. Here we came to the conclusion that instalment selling, instead of simply advancing the time when demand becomes effective, really leads to an increase of purchasing power. This is due not so much to the consideration that there is a correlation between output and demand, as to the undoubted fact that instalment credit puts goods of potential positive utilization at the disposal of the consumer at an earlier period than would otherwise be practicable. As over against this conclusion, we studied next the problem of costs or finance charges; and while we learned that there were still many abuses to be noted, we saw that the general tendency of the movement is in the direction of eliminating abuses. We thus arrived at the conclusion that while instalment selling undoubtedly increases the cost of the product, this disadvantage is probably on the whole outweighed by the corresponding advantages.

Coming next to the influence of instalment credit upon production, the result of our analysis was that instalment selling tends in part at least to a stabilization and regularity of output but, above all, because of the device of fractional payments, to an actual increase and acceleration of production.

We took up finally the effects of instalment selling on the credit structure. Here we found indeed that there are special risks connected with instalment credit, and that these center about repossessions and used-car problems. This led us to a comparison between the recourse and the non-recourse systems in the automobile business, with the conclusion that the weight of argument is distinctly in favor of the recourse system. We studied next the connection between instalment credit and business depressions; and, as a result of a detailed investigation into the conditions produced by the anthracite coal strike, we concluded that the dangerous effects of instalment selling on the credit structure have been exaggerated, and that, although the facts are as yet inadequate to furnish a foundation for definite statement, instalment credit under proper conditions is probably not open to the charges so often preferred against it in this respect.

Summing up the entire matter, we should say that instalment selling, like every new institution, is subject to the perils of novelty. It has engendered new devices and has created a new technique, but it has undoubtedly come to stay. Some abuses and perils which it were short-sighted to deny have crept in. What is needed is to apply to each particular case some of the results of the analysis which we have attempted to present. As the years roll by, experience will teach us to what classes of commodities and to what strata of society instalment selling is economically applicable. In the course of time outworn methods will be discarded and

new abuses will undoubtedly appear. Is it not the part of wisdom to separate the chaff from the grain, to be on our guard against the obvious dangers, and to eliminate one by one the improper practices until, precisely as in the case of our banking structure, we may be able to establish fairly definite and generally accepted standards for distinguishing the sound from the unsound, the real from the specious? When instalment selling comes to be measured by these criteria, we may expect to learn that the innocuous and the salutary must not be confounded with the inappropriate and the regrettable, and that, in its ultimate and refined forms, instalment credit will be recognized as constituting a significant and valuable contribution to the modern economy.